

abbvie



Irish Society
for Rheumatology

Autumn Meeting 2015



24 - 25 September 2015
Killashee House Hotel
Naas, Co. Kildare





Transforming lives¹

15 years of clinical trials and real world experience¹

1st approved anti-TNF in RA¹⁷

More than 350 trials¹⁸

4 Over million patient-years of collective clinical experience¹¹

More than 5700 publications¹⁹

1 Over million patients treated¹⁰

of partnership and experience
15 years



ABBREVIATED PRESCRIBING INFORMATION

Enbrel[®]

etanercept

Before prescribing Enbrel[®] please refer to full Summary of Product Characteristics (SmPC). **Presentation:** Enbrel Pre-filled Syringe: Enbrel 25 mg and 50 mg solution for injection in pre-filled syringe. Each pre-filled syringe contains either 25 mg or 50 mg etanercept. Enbrel Pre-filled Pen (MYCLIC[®]): Enbrel 50 mg solution for injection in pre-filled pen. Each pre-filled pen contains 50 mg etanercept. Enbrel Powder: Enbrel 25 mg powder and solvent for solution for injection. Each vial contains 25 mg etanercept and each pre-filled syringe contains 1 ml water for injections. Enbrel Paediatric: Enbrel 10 mg powder and solvent for solution for injection for paediatric use. Each vial contains 10 mg etanercept and each pre-filled syringe contains 1 ml water for injections. **Uses:** Adults: Moderate to severe active rheumatoid arthritis (RA), in combination with methotrexate, when response to disease-modifying anti-rheumatic drugs (DMARDs), including methotrexate (unless contraindicated), has been inadequate. Enbrel can be given as monotherapy in the case of intolerance to methotrexate or when continued treatment with methotrexate is inappropriate. Severe, active and progressive RA without prior methotrexate treatment. Enbrel alone or with methotrexate has been shown to reduce the rate of progression of joint damage measured by X-ray and to improve physical function. Patients with moderate to severe plaque psoriasis (PP) who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapy including ciclosporin, methotrexate or PUVA. Active and progressive psoriatic arthritis (PsA) when response to DMARDs has been inadequate. Enbrel has been shown to improve physical function in PsA patients, and to reduce the progression rate of peripheral joint damage as measured by X-ray in patients with polyarticular symmetrical subtypes of PsA. Severe active ankylosing spondylitis (AS) when response to conventional therapy has been inadequate. Non-radiographic axial spondyloarthritis (nr-axSpA). Treatment of adults with severe non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) evidence, who have had an inadequate response to nonsteroidal anti-inflammatory drugs (NSAIDs). Children aged 2-17 years: Juvenile idiopathic arthritis (JIA). Polyarthritis (rheumatoid factor positive or negative) and extended oligoarthritis from the age of 2 years when inadequate response to, or intolerant of methotrexate. Psoriatic arthritis from the age of 12 years when inadequate response to, or intolerant of methotrexate. Enthesitis-related arthritis from the age of 12 years when inadequate response to, or intolerant of conventional therapy. Children aged 6-17 years: Chronic severe psoriasis when inadequately controlled by, or intolerant to, other systemic therapies or phototherapies. **Dosage:** By subcutaneous injection. Adults: RA – 25 mg twice weekly or 50 mg once weekly PP – 25 mg twice weekly or 50 mg once weekly for up to 24 weeks, or 50 mg twice weekly for up to 12 weeks followed by 25 mg twice weekly or 50 mg once weekly for a further 12 weeks if needed. Continuous therapy may be appropriate for some adult patients. Discontinue if no response after 12 weeks. For re-treatment: 25 mg twice weekly or 50 mg once weekly for up to 24 weeks. AS, nr-axSpA and PsA – 25 mg twice weekly or 50 mg once weekly. Children aged 2-17 years: JIA – 0.4 mg/kg (maximum per dose 25 mg) twice weekly with an interval of 3 – 4 days or 0.8 mg/kg (maximum per dose 50 mg) once weekly. Discontinuation of treatment should be considered in patients who show no response after 4 months. Children aged 6-17 years: Plaque psoriasis in children aged 6-17 years – 0.8 mg/kg (maximum per dose 50 mg) once weekly for up to 24 weeks. Discontinue if no response after 12 weeks. For re-treatment: 0.8 mg/kg (maximum per dose 50 mg) once weekly for up to 24 weeks. **Contra-indications:** Hypersensitivity to any of the ingredients, sepsis or risk of sepsis, active infections. **Warnings and Precautions:** Enbrel should be initiated and supervised by specialist physicians experienced in the diagnosis and treatment of RA, JIA, PsA, AS, PP or Paediatric PP. Patients treated with Enbrel should be given the Patient Alert Card. Use carefully in patients predisposed to, or with history of, infection due to underlying diseases other than RA (e.g. advanced or poorly controlled diabetes) or with history of blood dyscrasias, pre-existing or predisposition to demyelinating disease or congestive heart failure. Cases of active tuberculosis have been reported, therefore all patients should be evaluated for both active and inactive TB prior to being treated with Enbrel. If active TB is diagnosed, Enbrel should not be initiated. Caution should be used when administering Enbrel to patients previously infected with hepatitis B and there have been reports of worsening hepatitis C in patients receiving Enbrel. Use with caution in patients with a history of hepatitis C. Whether treatment with Enbrel might influence the development and course of active and/or chronic infections is unknown. Concurrent administration of Enbrel and anakinra has been associated with increased risk of serious infections and neutropenia, and is therefore not recommended. In clinical studies, concurrent administration of abatacept and Enbrel resulted in increased incidences of serious adverse events, and is therefore not recommended. Use caution when considering combination therapy with DMARDs other than methotrexate. Reports of various malignancies have been received in the post-marketing period, therefore with current knowledge, a possible risk for the development of lymphomas, leukaemia or other haematopoietic or solid malignancies in patients treated with a TNF-antagonist cannot be excluded. Malignancies, some fatal, have been reported among children, adolescents and young adults (up to 22 years of age) treated with TNF-antagonists (initiation of therapy ≤ 18 years of age) in the post marketing setting. Melanoma and non-melanoma skin cancer (NMSC) have been reported in patients treated with TNF-antagonists, including Enbrel. Post-marketing cases of Merkel cell carcinoma have been reported very infrequently in patients treated with Enbrel. Periodic skin examination is recommended for all patients, particularly those with risk factors for skin cancer. Enbrel has not been studied in combination with other systemic

therapies or phototherapy for the treatment of psoriasis. Monitor closely if patient develops new infection during treatment. Discontinue treatment if serious infection or allergic reaction develops or if blood dyscrasias are confirmed. Caution should be used in patients who have moderate to severe alcoholic hepatitis and Enbrel should not be used in patients for the treatment of alcoholic hepatitis. Discontinue temporarily if significantly exposed to varicella virus. Live vaccines should not be given concurrently with Enbrel. Paediatric patients should have received all vaccines recommended in current immunization guidelines prior to starting Enbrel. Treatment with Enbrel may result in the formation of autoantibodies. Enbrel is not recommended for use in patients with Wegener's granulomatosis. There have been reports of hypoglycaemia in Enbrel patients receiving medication for diabetes, necessitating a reduction in anti-diabetic medication in some of these patients. There have been reports of Inflammatory Bowel Disease (IBD) and uveitis in JIA patients being treated with Enbrel. Caution should be exercised when treating the elderly and with particular attention to occurrence of infections. **Pregnancy & Lactation:** Enbrel is not recommended in pregnant or breast-feeding women. **Undesirable Effects:** Adults: The most commonly reported adverse reactions are injection site reactions, infections, allergic reactions, development of autoantibodies, itching, and fever. See SmPC for less commonly reported side effects. TNF-antagonists, such as Enbrel, affect the immune system and their use may affect the body's defences against infection and cancer. Serious infections affect fewer than 1 in 100 patients treated with Enbrel. Reports have included fatal and life-threatening infections and sepsis. Various malignancies have also been reported with use of Enbrel, including cancers of the breast, lung, skin and lymphatic system (lymphoma). Serious infections and other adverse events such as uncommon reports of: thrombocytopenia, systemic vasculitis, uveitis and scleritis, interstitial lung disease, rare reports of tuberculosis, opportunistic infections, anaemia, leucopenia, neutropenia, pancytopenia, seizures, worsening of heart failure, autoimmune hepatitis, Steven Johnson's syndrome and very rare reports of: anaphylaxis, toxic epidermal necrolysis and aplastic anaemia have been reported. Reactivation of hepatitis B (a liver infection) and worsening of symptoms of dermatomyositis have also been reported. Central and peripheral demyelinating events have been seen rarely and very rarely, respectively, with Enbrel use. There have been rare reports of lupus, lupus-related conditions, and vasculitis. Rate of new malignancies was similar to that expected for the population studied. Fatalities associated with serious infections, pancytopenia, aplastic anaemia and interstitial lung disease have also been reported. **Paediatrics:** Generally as for adults, except the following were more common: headaches, nausea, vomiting and abdominal pain. In addition the following were reported as severe events: varicella, appendicitis, gastroenteritis, depression/personality disorder, cutaneous ulcer, oesophagitis/gastritis, group A streptococcal septic shock, type 1 diabetes mellitus and soft tissue and post operative wound infection. There have been post-marketing reports of IBD and uveitis in JIA patients, including cases indicating a positive re-challenge. See section 4.8 of the SmPC for how to report adverse reactions. **Package Quantities:** Enbrel Pre-filled Syringe: Each carton contains 4 pre-filled syringes containing either 25 mg or 50 mg of Enbrel and 4 alcohol swabs. Enbrel Pre-filled Pen (MYCLIC): Each carton contains 4 pre-filled pens containing 50 mg of Enbrel and 4 alcohol swabs. Enbrel Powder: Each carton contains 4 vials of Enbrel 25 mg powder, 4 pre-filled syringes of water for injections, 4 needles, 4 vial adaptors and 8 alcohol swabs. Enbrel Paediatric (10 mg): Each carton contains 4 vials of Enbrel 10 mg powder, 4 pre-filled syringes of water for injections, 4 needles, 4 vial adaptors and 8 alcohol swabs.

European Marketing Authorisation Numbers: Enbrel Pre-filled Syringe 25 mg: EU/1/99/126/013 Enbrel Pre-filled Syringe 50 mg: EU/1/99/126/017 Enbrel Pre-filled Pen (MYCLIC) 50 mg: EU/1/99/126/020 Enbrel Powder 25 mg: EU/1/99/126/003 Enbrel Paediatric 10 mg: EU/1/99/126/022. **Legal Category:** 51A. **European Marketing Authorisation Holder:** Pfizer Limited, Ramsgate Road, Sandwich, Kent, CT13 9NJ, UK. **For full prescribing information see the Summary of Product Characteristics. For further information on this medicine please contact:** Pfizer Medical Information on 1800 633 363 or at EUMEDINFO@pfizer.com. For queries regarding product availability please contact: Pfizer Healthcare Ireland, Pfizer Building 9, Riverwalk, National Digital Park, Citywest Business Campus, Dublin 24 + 353 1 4676500. **API Reference Number:** EN_0_Pflet number: 2013-0003980. **Date of Prescribing Information:** July 2014.

[†] Across all indications.

References: 1. Scott LJ. Drugs. 2014;74:1379-1410. 2. Enbrel Summary of Product Characteristics. September 2014. 3. Humira Summary of Product Characteristics. November 2014. 4. Remicade Summary of Product Characteristics. July 2014. 5. Cimzia Summary of Product Characteristics. December 2014. 6. Simponi Summary of Product Characteristics. January 2015. 7. Remicade EMA report 8. <http://clinicaltrials.gov>. Accessed 12 Nov 2014. 9. www.pubmed.org. Accessed 12 Nov 2014. 10. Data on File. January 2015. 11. Data on File. March 2014.



Welcome Message from the ISR President Professor David Kane

Dear Colleagues and Friends

It is my very great pleasure to welcome you all to our Autumn meeting in Killashee Hotel. This is the final meeting of my Presidency, a period which has been a great honour for me in leading such a prestigious organisation. I sincerely hope that you have enjoyed the past two years half as much as I have.



The Irish Society for Rheumatology has a proud history and tradition. Arguably its main strength lies in the cross-speciality involvement of Rheumatologists and scientists in an all Ireland capacity. Our combined focus is in the understanding of the mechanisms of disease in Rheumatology and the clinical management of our patients. The recent establishment of RA Biologics Registry of Ireland is, I hope, going to provide the foundation for some of our future researchers in Ireland.

I am particularly delighted to see the inaugural Bernard Connor undergraduate medal winner Eva McCabe at the same session as our Young Investigator and Lifetime Achievement award and hope that future Bernard Connor medal winners will one day re-appear as Young Investigator and perhaps Lifetime Achievement Winners. I am particularly grateful to Dr Suzanne Donnelly and our judges in selecting the Bernard Connor medal winner. This year we have offered a small number of meeting places to undergraduates as meeting interns in order to give them exposure to what a career in rheumatology can offer them.

I hope we can continue to build on our strengths and to continue to develop the inter-good relationships between all stakeholders in Irish Rheumatology. It is our collective responsibility to raise public awareness of the disease. The ISR must support the profession in delivering high quality care of patients and lobby centrally to influence government policy.

I warmly welcome our colleagues in IRHPS and I hope that they will have a memorable conference. Likewise a big thank you to our colleagues in Industry for their continued support.

I am very grateful to our Abstract Review Panel for their diligence in selecting the best abstract submissions for presentation. Well done John Carey, Anne Barbara Mongey, Nicola Ambrose and John Ryan.

We have put together a very good academic programme for this meeting. I trust that you will find it educational, interesting and stimulating.

I have no doubt that within the society we have world class professionals delivering state of the art services to the population. We also have many recently appointed colleagues with novel skills and a cohort of outstanding trainees.

I would like to thank the officers and board for their support during the past two years, likewise the staff of ISR. At the end of this year I will hand over the baton to Sandy Fraser to whom I wish every success and support over the coming two years.

I with you, am aware of the problems that exist but look forward with enthusiasm to the future and the challenges ahead.

For now let us all enjoy the educational and social interaction !

I look forward to meeting with all of you here, renewing old acquaintances and making new ones.

Yours sincerely

Professor David Kane,
ISR President

Proud of our Heritage...



Remicade[®]

INFLIXIMAB



...Committed to our future

Remicade[®] 100mg Powder for Concentrate for Solution for Infusion (infliximab) Prescribing Information [Refer to full SPC text before prescribing Remicade (infliximab)] Indications: Rheumatoid Arthritis (RA): Remicade, in combination with methotrexate (MTX), is indicated for the reduction of signs and symptoms, as well as the improvement in physical function, in adult patients with active RA when the response to disease-modifying anti-rheumatic drugs (DMARDs), including MTX, has been inadequate, and in adult patients with severe, active and progressive disease not previously treated with MTX or other DMARDs. In these patient populations, a reduction in the rate of the progression of joint damage, as measured by X-ray, has been demonstrated. **Adult Crohn's Disease (CD):** Remicade is indicated for the treatment of moderately to severely active CD in adult patients who have not responded to, or are intolerant of, a full and adequate course of therapy with a corticosteroid and/or an immunosuppressant; and fistulising active CD in adult patients who have not responded despite a full and adequate course of therapy with conventional therapy (including antibiotics, drainage and immunosuppressive therapy). **Paediatric Crohn's Disease (CD):** Remicade is indicated for the treatment of severe, active CD in children and adolescents aged 6 to 17 years who have not responded to conventional therapy including a corticosteroid, an immunomodulator and primary nutrition therapy, or who are intolerant to or have contraindications for such therapies. **Ulcerative Colitis (UC):** Remicade is indicated for the treatment of moderately to severely active UC in adult patients who have had an inadequate response to conventional therapy including corticosteroids and 5-aminosalicylates (5-ASA) or azathiopurine (AZA), or who are intolerant to or have medical contraindications for such therapies. **Psoriatic Ulcerative Colitis (UC):** Remicade is indicated for treatment of severely active UC, in children and adolescents aged 6 to 17 years, who have had an inadequate response to conventional therapy including corticosteroids and 5-MP or AZA, or who are intolerant to or have medical contraindications for such therapies. **Ankylosing Spondylitis (AS):** Remicade is indicated for the treatment of severe, active AS, in adult patients who have responded inadequately to conventional therapy. **Psoarthritis (PsA):** Remicade is indicated for the treatment of active and progressive PsA, in adult patients when the response to previous DMARD drug therapy has been inadequate. Administration should be in combination with MTX or alone in patients who show intolerance to MTX or for whom MTX is contraindicated. A reduction in the rate of progression of peripheral joint damage in patients with polyarticular symmetrical subtypes of PsA has been measured by X-ray. **Psoarthritis (PsA):** Remicade is indicated for the treatment of moderate to severe plaque PsA in adult patients who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapy including cyclosporine, MTX or PUVA. **Dosage and administration:** To improve the traceability of biological medicinal products, the trademark and the batch number of the administered product should be clearly recorded in the patient file. Remicade should be administered intravenously, initiated and supervised by physicians experienced in the diagnosis and treatment of RA, CD, UC, AS, PsA and PsD. Remicade should be administered intravenously over a 2-hour period. All patients administered Remicade should be observed for at least 1 to 2 hours post infusion for acute infusion-related reactions by appropriately trained healthcare professionals. **Shortened infusions across adult indications:** In carefully selected adult patients who have tolerated at least 3 initial 2-hour infusions of Remicade (induction phase) and are receiving maintenance therapy, consideration may be given to administering subsequent infusions over a period of not less than 1 hour. If an infusion reaction occurs in association with a shortened infusion, a slower infusion rate may be considered for future infusions if treatment is to be continued. Shortened infusions at doses >6 mg/kg have not been studied. **RA:** 3 mg/kg given as an intravenous infusion followed by additional 3 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks thereafter. **Adult moderately to severely active CD:** 5 mg/kg given as an intravenous infusion followed by an additional 5 mg/kg infusion 2 weeks after the first infusion. If a patient does not respond after 2 doses, no additional treatment should be given. **Adult fistulising active CD:** 5 mg/kg intravenous infusion followed by additional 5 mg/kg infusions at 2 and 6 weeks after first infusion. If a patient does not respond after 3 doses, no additional treatment should be given. **UC:** 5 mg/kg given as an intravenous infusion followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks. Clinical response is usually achieved within 16 weeks of treatment (3 doses). **AS:** 5 mg/kg given as an intravenous infusion followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks. If a patient does not respond after 2 doses, no additional treatment should be given. **PsA:** 5 mg/kg given as an intravenous infusion followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks thereafter. **PsD:** 5 mg/kg given as an intravenous infusion followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks. If a patient shows no response after 4 doses, no additional treatment should be given. **Readministration:** Remicade can be readministered within 16 weeks following the last infusion. The safety and efficacy of readministration after a Remicade-free interval of more than 16 weeks has not been established in either CD or RA. The safety and efficacy of readministration in AS, other than every 6 to 8 weeks and in PsA and UC, other than every 8 weeks, has not been established. Readministration with one single Remicade dose in PsD after an interval of 20 weeks suggests reduced efficacy and a higher incidence of mild to moderate infusion reactions when compared to the initial infusions regime. Limited experience from retreatment, using a reduction regimen suggests a higher incidence of infusion reactions, some serious, when compared to 8 weekly maintenance treatment. In case maintenance therapy is interrupted in any indication, and there is a need to restart treatment, Remicade should be readministered as a single dose followed by the maintenance dose recommendations. **Paediatric population:** **CD (6 to 17 years):** 5 mg/kg given as an intravenous infusion followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks thereafter. If a patient does not respond by 10 weeks, no additional treatment should be given. **UC (6 to 17 years):** 5 mg/kg given as an intravenous infusion over a 2-hour period followed by additional 5 mg/kg infusion doses at 2 and 6 weeks after the first infusion, then every 8 weeks thereafter. Available data do not support further infliximab treatment in paediatric patients not responding within the first 8 weeks of treatment. **Contra-indications:** Tuberculosis or other severe infections such as sepsis, abscesses and opportunistic infections; patients with a history of hypersensitivity to infliximab, other murine proteins or any of the excipients, patients with moderate or severe heart failure (NYHA class III/IV). **Precautions and Warnings:** **Infusion reactions:** Acute infusion reactions including anaphylactic reactions may develop during (within seconds) or within a few hours following infusion. If acute infusion reactions occur, the infusion must be interrupted immediately. Emergency equipment, such as adrenaline, antihistamines, corticosteroids and an artificial airway must be available. Antibodies to infliximab may develop and have been associated with increased frequency of infusion reactions. Symptomatic reactions should be given and further Remicade infusions must not be administered. In clinical studies, delayed hypersensitivity reactions have been reported. Available data suggest an increased risk for delayed hypersensitivity with increasing Remicade-free intervals. **Infections:** Patients must be monitored closely for infections, including tuberculosis, before, during and up to 6 months after treatment with Remicade. Exercise caution with use of Remicade in patients with chronic infection or a history of recurrent infection. Patients should be advised of potential risk factors for infections. Suppression of TNF α may mask symptoms of infection such as fever. Tuberculosis, bacterial infections including sepsis and pneumonia, invasive fungal, viral and other opportunistic infections, have been observed, some of which have been fatal. Infections were reported more

frequently in paediatric populations than in adult populations. There have been reports of active tuberculosis in patients receiving Remicade. Patients should be evaluated for active or latent tuberculosis before Remicade treatment. All such tests should be recorded on the Patient Alert Card provided with the product. If active tuberculosis is diagnosed, Remicade therapy must not be initiated. If latent tuberculosis is diagnosed, treatment with anti-tuberculosis therapy must be initiated before initiation of Remicade. Patients on Remicade treatment should be advised to seek medical advice if symptoms of tuberculosis appear. An invasive fungal infection such as aspergillosis, candidiasis, pneumocystis, histoplasmosis, coccidioidomycosis or blastomycosis should be suspected in patients if a serious systemic illness is developed, a physician with expertise in the diagnosis and treatment of invasive fungal infections should be consulted at an early stage. Patients with fistulising CD and acute suppurative fistulae must not initiate Remicade therapy until possible source of infection is excluded. **Hepatitis B (HBV) reactivation:** Reactivation of HBV occurred in patients receiving Remicade who were chronic carriers. Some cases had a fatal outcome. Patients should be tested for HBV infection before initiating treatment with Remicade. **Hepatobiliary events:** Very rare cases of jaundice and non-infectious hepatitis, some with features of autoimmune hepatitis have been observed. Isolated cases of liver failure resulting in liver transplantation or death have occurred. **Vaccinations:** It is recommended that live vaccines not be given concurrently. Prior to initiating Remicade therapy it is recommended that paediatric patients be brought up to date with all vaccinations. **Autoimmune processes:** If a patient develops symptoms suggestive of a lupus-like syndrome following treatment with Remicade and is positive for antibodies against double-stranded DNA, treatment must be discontinued. **Neurological events:** Anti-TNF α agents have been associated with cases of new onset or exacerbation of clinical symptoms and/or radiographic evidence of peripheral and CNS demyelinating disorders, including Guillain-Barré syndrome and multiple sclerosis. In patients with a history of demyelinating disorders, the benefits and risks of anti-TNF treatment should be carefully considered before initiation of Remicade therapy. Discontinuation of Remicade should be considered if these disorders develop. **Malignancies and lymphoproliferative disorders:** A risk of the development of lymphomas and other malignancies in patients (including children and adolescents) cannot be excluded. Caution is advised in patients with history of malignancy and in patients with increased risk for malignancy due to heavy smoking. Rare postmarketing cases of hepatocellular T-cell lymphoma have been reported which were usually fatal. Most Remicade cases have occurred in patients with CD or UC treated concomitantly with AZA or 6-MP. Caution should be exercised in patients with PsD and a medical history of extensive immunosuppressant therapy or prolonged PUVA treatment. Patients with UC at increased risk for, or with a prior history of dysplasia or colon carcinoma should be screened for dysplasia before therapy and at regular intervals throughout their disease course. Metastatic and Merkel cell carcinoma have been reported; periodic skin examination is recommended, particularly for patients with risk factors for skin cancer. **Heart failure:** Remicade should be used with caution in patients with mild heart failure (NYHA class III) and discontinued in case of new or worsening symptoms of heart failure. **Other:** Patients requiring surgery whilst on Remicade therapy should be closely monitored for infections. **Haematologic reactions:** Discontinuation of Remicade therapy should be considered in patients with confirmed significant haematologic abnormalities, including pancytopenia, leucopenia, neutropenia and thrombocytopenia. **Special populations:** Particular attention should be paid when treating the elderly (>65 years) due to a greater incidence of serious infections seen in Remicade treated patients. Some of these had a fatal outcome. **Interactions:** No interaction studies have been performed. Combination of Remicade with other biological therapeutics used to treat the same condition as Remicade, including anakinra and abatacept is not recommended. It is recommended that live vaccines and therapeutic infectious agents should not be given concurrently with Remicade. **Fertility, Pregnancy and Lactation:** Women of childbearing potential should use adequate contraception and continue its use for at least 6 months after the last Remicade treatment. Administration of Remicade is not recommended during pregnancy or breastfeeding. Administration of live vaccines to infants exposed to infliximab in utero is not recommended for 6 months following the mother's last infliximab infusion during pregnancy. Effects of infliximab on fertility and general reproductive function are unknown. **Side-effects:** **Very Common (>1/10):** Viral infection, headache, upper respiratory tract infection, sinusitis, abdominal pain, nausea, infusion related reaction, pain. **Common (>1/100 to <1/10):** Bacterial infections, neutropenia, leucopenia, anaemia, lymphadenopathy, allergic respiratory symptom, depression, insomnia, vertigo, dizziness, hyposarthrosis, paraesthesia, conjunctivitis, tachycardia, palpitation, hypotension, hypertension, scleromyia, hot flash, flushing, lower respiratory tract infection, dyspnoea, epistaxis, gastrointestinal haemorrhage, diarrhoea, dyspepsia, gastroesophageal reflux, constipation, hepatic function abnormal, transaminases increased, new onset or worsening psoriasis including pustular psoriasis (primarily palm & sole), urticaria, rash, pruritus, hyperhidrosis, dry skin, fungal dermatitis, eczema, alopecia, arthralgia, myalgia, back pain, urinary tract infection, chest pain, fatigue, fever, injection site reaction, chills and oedema, in phase 3 clinical studies, 18% of infliximab-treated patients compared with 5% of placebo-treated patients experienced an infection related reaction. In post-marketing spontaneous reporting, infections are the most common serious adverse event. The most frequently reported opportunistic infections with a mortality rate of >5% include pneumocystis, candidiasis, listeria and aspergillosis. **Other less common and rarely reported side effects are listed in the SPC. Overdose:** No case of overdose has been reported. Single doses up to 20 mg/kg have been administered without toxic effects. **Package Quantities:** Type 1 vials, with rubber stoppers and aluminium crimp caps protected by plastic caps, containing a lyophilised powder (infliximab 100mg). **Legal Category:** POM. **Marketing Authorisation Number:** EU/1/99/116/001. **Marketing Authorisation Holder:** Janssen Biologics B.V., Eindhoven 101, 2333 CB Leiden, The Netherlands. **Adverse events should be reported.** Reporting forms and information can be found at www.hpra.ie. **Adverse events should also be reported to MSD (Tel: 01-299 8700).** Date of Revision: June 2014. Further information is available on request from: MSD, Red Oak North, South County Business Park, Leopardstown, Dublin 18 or from www.medicines.ie. © Merck Sharp & Dohme Ireland (Human Health) Limited, 2014. All rights reserved. Date of preparation: March 2015.

References: 1. Data on file MSD PSUR 26 2. Remicade SmPC, May 2014. 3. <http://www.ncbi.nlm.nih.gov/pubmed/26811611> Remicade (infliximab) Accessed 20 June 2013. 4. <http://www.clinicaltrials.gov/ct2/results?term=Remicade+infliximab> Accessed 20 June 2013. AS = ankylosing spondylitis; CD = Crohn's disease; PsA = psoriatic arthritis; RA = rheumatoid arthritis; UC = ulcerative colitis.





Autumn Meeting
September 24th & 25th 2015
Killashee Hotel, Naas

Thursday 24th September

- 08.00 **Special Interest Groups**
- Private Practice Meeting - **Dr John McCarthy** Chair
 - Regs & Sp R Seminar - **Dr Xenofon Baraliakos** on Practical Teaching in MRI
 - T2T Presentation. Chair **Dr Bryan Whelan**.
- 10.00 **Registration / coffee / poster viewing / Meet the Industry**
- 10.15 **Opening and Welcome**
from **Prof David Kane, President of the ISR**
- 10.30 **Plenary Session 1**
Scientific Research Oral Presentations 1 - 4
- 11.30 **Keynote Speaker 1**
Dr. Xenofon Baraliakos
MD at Rheumazentrum Ruhrgebiet Herne, Ruhr-University Bochum. Cologne Area, Germany
"MRI in SPA"
- 12.15 **Lunch / poster viewing / Meet the Industry**
- 13.30 **Plenary Session 2**
Clinical Research Oral Presentations (5 – 8)
- 14.30 **Keynote Speaker 2**
Prof. Fergus Shanahan
Consultant Gastroenterologist. CUH. Director of Alimentary Pharmabiotic Centre, UCC.
"Microbiome a new frontier in disease management"
- 15.15 **Coffee / poster viewing / Meet the Industry**
- 15.45 **Keynote Speaker 3**
Dr Suresh Rattan
Department of Molecular Biology and Genetics - Molecular Nutrition. Aarhus University. Denmark.
"The Biology of Ageing"
- 16.45 **Young Investigator Award Lecture**
- 17.00 **ISR Lifetime achievement award.**
Dr Aubrey Bell
"What they don't teach you about Rheumatology in Medical School"
- 17.00 **ISR AGM**

Friday 25th September

- 08.00 **Pfizer Satellite Meeting**
"Biosimilars - Guidelines and Education"
- 09.00 **Plenary Session 3**
Clinical Case Presentations
(with Interactive audience participation)
- 10.00 **Keynote Speaker 4**
Prof Gerd Burmester
Clinic for Rheumatology and Clinical Immunology Charitéplatz 1. Berlin.
"Advances in Immunotherapy in Rheumatology. Past Present and Future"
- 11.00 **Coffee / poster viewing / Meet the Industry.**
- 11.30 **Keynote Speaker 5**
Prof. Donal O Shea
Consultant Endocrinologist and Physician St Vincent's University Hospital and St Columcille's Hospital.
"The Obesity Epidemic and Rheumatology"
- 12.15 **Biologics Registry Meeting**
Prof. Gerry Wilson SVUH
- 13.00 **Prize giving / close of meeting**
- 13.15 **Lunch**



The first biologic approved in both SC and IV formulations for the treatment of moderate to severe active rheumatoid arthritis*

Patient-reported improvements in pain, physical function, work productivity and fatigue were maintained after 2 years¹

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(abatacept)

* in combination with methotrexate

ORENCIA[®] (abatacept) PRESCRIBING INFORMATION. See Summary of Product Characteristics before prescribing. **PRESENTATION:** 250 mg powder for concentrate for solution for IV infusion containing 250 mg abatacept per vial. Each ml contains 25 mg of abatacept, after reconstitution; 125 mg pre-filled syringe for SC injection. Each pre-filled syringe contains 125 mg of abatacept in 1 ml. **INDICATION:** Rheumatoid arthritis (IV infusion and SC pre-filled syringe); Treatment of moderate to severe active rheumatoid arthritis (RA), in combination with methotrexate, in adult patients who have responded inadequately to previous therapy with one or more disease-modifying anti-rheumatic drugs (DMARDs) including methotrexate (MTX) or a Tumour Necrosis Factor (TNF) -alpha inhibitor. A reduction in the progression of joint damage and improvement of physical function have been demonstrated during combination treatment with abatacept and methotrexate. See SmPC. **Polyarticular Juvenile Idiopathic Arthritis (pJIA) (IV infusion only):** Orencia 250 mg powder for concentrate for solution for IV infusion is indicated for treatment of moderate to severe active pJIA in paediatric patients 6 years of age and older who have had an insufficient response to other DMARDs including at least one TNF inhibitor. **DOSAGE and ADMINISTRATION:** Treatment should be initiated and supervised by specialist physicians experienced in the diagnosis and treatment of RA. Orencia 250 mg powder for concentrate for solution for IV infusion. **Adults and elderly:** Patients weighing < 60 kg: 500 mg (2 vials). Patients weighing ≥ 60 kg to ≤ 100 kg: 750 mg (3 vials). Patients weighing > 100 kg: 1000 mg (4 vials). **Treatment of pJIA:** Paediatric patients, 6 to 17 years of age, weighing less than 75 kg: 10 mg/kg. Paediatric patients weighing 75 kg or more: to be administered adult dosage, not exceeding a maximum dose of 1,000 mg. See SmPC for details of reconstitution and administration as a 30 minute IV infusion. After initial administration, Orencia should be given at 2 and 4 weeks, then every 4 weeks thereafter. **Children:** Use in children below 6 years of age is not recommended. Orencia 125 mg solution for injection (SC pre-filled syringe) **Adults and elderly:** Orencia SC may be initiated with or without an intravenous (IV) loading dose. Orencia SC should be administered weekly at a dose of 125 mg by subcutaneous injection regardless of weight. If a single IV infusion is given to initiate treatment (IV loading dose before SC administration), the first 125 mg abatacept SC should be administered within a day of the IV infusion, followed by the weekly 125 mg abatacept SC injections. Patients transitioning from Orencia IV therapy to SC administration should administer the first subcutaneous dose instead of the next scheduled intravenous dose. **Children:** Administration in children below 18 years of age is not recommended. The continuation of treatment with abatacept should be re-assessed if patients do not respond within 6 months. **CONTRAINDICATIONS:** Hypersensitivity to the active substance or excipients. Severe and uncontrolled infections such as sepsis and opportunistic infections. **WARNINGS AND PRECAUTIONS:** **Allergic Reactions:** Caution in patients with a history of allergic reactions. Anaphylaxis or anaphylactoid reactions can occur after the first infusion and can be life threatening. Orencia IV or SC should be discontinued permanently if a patient develops serious allergic or anaphylactic reaction. **Infections:** Caution should be exercised when considering the use in patients with a history of frequent infections, or underlying conditions which may predispose to infection. Treatment with Orencia should not be initiated with patients with active infections until infections are controlled. Screening for tuberculosis and hepatitis B should be performed prior to therapy. Any patient who develops a new infection should be closely monitored and Orencia should be discontinued if a patient develops a serious infection. Monitor patients for signs of infection when transitioning from TNF-antagonist to Orencia. Co-administration of Orencia with biologic immunosuppressive or immunomodulatory agents could potentiate the effects of abatacept on the immune system. Treatment with immunosuppressive therapy may be associated with progressive multifocal leukoencephalopathy (PML). Orencia treatment should be discontinued if neurological symptoms suggestive of PML occur, and appropriate diagnostic measures initiated. **Malignancies:** The potential role of Orencia in the development of malignancies is unknown, see SmPC. **Elderly:** Caution should be used when treating elderly patients due to a higher incidence of infections and malignancies in this patient group. **Autoimmune processes:** Theoretical risk of deterioration in autoimmune disease. **Immunisation:** Live vaccines should not be given simultaneously or within 3 months of discontinuation of Orencia. See SmPC. **DRUG INTERACTIONS:** Concomitant therapy of Orencia with a TNF-inhibitor is not recommended. No major safety issues were identified with the use of Orencia in combination with sulfasalazine, hydroxychloroquin or leflunomide. **PREGNANCY AND LACTATION:** Do not use in pregnancy unless clearly necessary. Women should use contraception and not breast-feed during treatment and for up to 14 weeks after last dose treatment. **UNDESIRABLE EFFECTS:** In adult placebo-controlled trials the following adverse drug reactions were reported. **Very Common (≥ 1/10):** upper respiratory tract infection including tracheitis, nasopharyngitis. **Common (≥ 1/100 to < 1/10):** Lower respiratory tract infection (including bronchitis), urinary tract infection, herpes infections (including herpes simplex, oral herpes and herpes zoster), rhinitis, pneumonia, influenza, leukopenia, headache, dizziness, paraesthesia, conjunctivitis, hypertension, flushing, blood pressure increased, cough, abdominal pain, diarrhoea, nausea, dyspepsia, mouth ulceration, aphthous stomatitis, vomiting, liver function test abnormal (including transaminases increased), rash (including dermatitis), alopecia, pruritus, pain in extremity, fatigue, asthenia, local injection site reactions*, systemic injection reactions* (e.g. pruritus, throat tightness, dyspnea) (*Orencia SC). **Uncommon (≥ 1/1,000 to < 1/100):** Tooth infection, onychomycosis, sepsis, musculoskeletal infections, skin abscess, pyelonephritis, pelvic inflammatory disease, basal cell and squamous cell carcinoma, skin papilloma, thrombocytopenia, hypersensitivity, depression, anxiety, sleep disorder (including insomnia), migraine, dry eye, visual acuity reduced, vertigo, palpitations, tachycardia, bradycardia, hypotension, hot flush, vasculitis, blood pressure decreased, bronchospasm, wheezing, dyspnea, gastritis, increased tendency to bruise, dry skin, urticaria, psoriasis, erythema, hyperhidrosis, arthralgia, amenorrhoea, menorrhagia, influenza like illness, weight increased. **Rare (≥ 1/10,000 to < 1/1,000):** Tuberculosis, bacteraemia, gastrointestinal infection, lymphoma, lung neoplasm malignant, throat tightness. See SmPC for further details. **LEGAL CATEGORY:** POM. **MARKETING AUTHORISATION NUMBER:** Orencia 250 mg concentrate for solution for infusion - EU/1/07/389/001, 1 vial pack; Orencia 125 mg solution for injection: EU/1/07/389/008, 4 pre-filled syringes with needle guard. **MARKETING AUTHORISATION HOLDER:** Bristol-Myers Squibb Pharma EEIG, Uxbridge Business Park, Sanderson Road, Uxbridge, Middlesex UB8 1DH, UK. **FURTHER INFORMATION FROM:** Bristol-Myers Squibb Pharmaceuticals, Watery Lane, Swords, Co. Dublin. Tel: 1-800-749-749 or medical.information@bms.com. **DATE OF PREPARATION:** September 2014. Job No: 427IE14PR0813-01

Reporting of suspect adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via Freepost, HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2, Tel: +353 1 6764971; Fax: +353 1 676 25 17. Website: www.hpra.ie, medsafety@hpra.ie.

Adverse reactions should also be reported to Bristol-Myers Squibb Medical Information on 1 800 749 749 or medical.information@bms.com.



Programme for IRHPS Meeting and AGM

September 24th & 25th 2015

Killashee Hotel, Naas

Thursday 24th September

- 10.00 **Registration / coffee / poster viewing / Meet the industry**
- 10.30 **Welcome by IRHPS Chairperson; Derek Deely**
- 10.35 **Oral Presentation 1:**
An Evaluation of the Effects of a Physiotherapy-led Exercise Class on Pain and Function in People with Knee Osteoarthritis.
Rachel Burke, Senior Physiotherapist, Naas General Hospital
- 11.00 **Oral Presentation 2:**
Evaluation of an OT-Led Work Stability Programme
“Working Successfully with Arthritis” for Workers with Inflammatory Arthritis.
Oriel Corcoran, Clinical Specialist Occupational Therapist,
Rheumatology Services, University Hospital Waterford
- 11.30 **ISR Programme**
- 12.15 **Lunch / Poster viewing / Meet the industry**
- 13.30 **“Obesity and the Rheumatology Patient”**
- Keynote Speakers:**
- Colin Dunleavy** PhD, MISCOP, Senior Physiotherapist,
Weight Management Service, St Columcille’s Hospital Loughlinstown, Co. Dublin.
- Mary Ryan**, Clinical Nurse Specialist, Weight Management Service,
St Columcille’s Hospital Loughlinstown, Co. Dublin.
- Natalie Wallace**, Senior Dietician, Weight Management Service,
St Columcille’s Hospital Loughlinstown, Co. Dublin.
- 15.15 **ISR Programme**
- 17.00 **IRHPS AGM**
- 19.30 **Drinks Reception**
- 20.00 **Conference Dinner**

Trust in HUMIRA: an unmatched legacy

10 years
of efficacy data for RA* in label¹

12 indications
The most of any self-administered biologic^{1,6}

More than
851,083 patients
currently treated worldwide²
—In more than **87 countries**³

More than
18 years
of clinical trial experience, beginning with RA^{4,†}

More than
23,000 patients
in global clinical studies⁵

71 clinical trials in
the largest published global
safety analysis for an anti-TNF⁵

HUMIRA (adalimumab) 40mg solution for injection in pre-filled pen or pre-filled syringe and HUMIRA 40mg / 0.8ml solution for injection for paediatric use Refer to Summary of Product Characteristics for full information. **Presentation:** Each 0.8ml single dose pre-filled pen, pre-filled syringe or vial contains 40mg of adalimumab. **Indications:** Rheumatoid arthritis (RA). In combination with methotrexate (MTX) is indicated for the treatment of moderate to severe, active RA in adult patients with inadequate response to disease-modifying anti-rheumatic drugs (DMARDs) including MTX. Also indicated for the treatment of severe, active and progressive RA in adults not previously treated with MTX. Can be given as monotherapy in case of intolerance to or when continued treatment with MTX is inappropriate. Humira has been shown to reduce the rate of progression of joint damage on X-ray and to improve physical function, in combination with MTX. Biphysaric juvenile idiopathic arthritis (pJIA). In combination with MTX for the treatment of active pJIA, in patients from the age of 2 years with inadequate response to one or more DMARDs, or as monotherapy in case of intolerance to or when continued treatment with MTX is inappropriate. Entesitis-related arthritis (ERA). For active ERA in patients from 6 years of age with inadequate response to, or intolerance to, conventional therapy. Psoriatic arthritis (PsA). For active and progressive PsA in adults with inadequate response to DMARDs. Humira has been shown to reduce the rate of progression of peripheral joint damage on X-ray in patients with polyarticular symmetrical subtypes of the disease and to improve physical function. Ankylosing spondylitis (AS). Treatment of adults with severe active AS with inadequate response to conventional therapy. Axial spondyloarthritis non-radiographic (nr-axSpA). Treatment of adults with severe axial spondyloarthritis without radiographic evidence of AS but with objective signs of inflammation by elevated CRP and / or MRI, who have had an inadequate response to, or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs). Crohn's disease (CD). Treatment of moderate to severe, active CD, in adult patients not responding despite a full and adequate course of therapy with a corticosteroid and / or an immunosuppressant, or who are intolerant to or have medical contraindications for such therapies. Psoriasis (Ps). Treatment of severe active Crohn's disease in paediatric patients (from 6 years of age) who have had an inadequate response to conventional therapy including primary nutrition therapy, a corticosteroid, and an immunomodulator, or who are intolerant to or have contraindications for such therapies. Psoriasis (Ps). Treatment of moderate to severe chronic plaque psoriasis in adult patients not responding to or contraindicated for, or are intolerant to other systemic therapy including cyclosporine, MTX or PUVA. Paediatric plaque psoriasis. Treatment of severe chronic plaque psoriasis in children and adolescents from 4 years of age with an inadequate response to or who are inappropriate candidates for topical therapy and phototherapies. Hidradenitis suppurativa (HS). For active moderate to severe hidradenitis suppurativa (acne inversa) in adult patients with an inadequate response to conventional systemic HS therapy. Ulcerative colitis (UC). Treatment of moderate to severe active UC in adult patients with an inadequate response to conventional therapy including corticosteroids and 6-mercaptopurine (6-MP) or azathiopurine (AZA), or who are intolerant to or contraindicated for such therapies. **Dosage and administration:** Treatment should be initiated and supervised by specialist physicians experienced in the diagnosis and treatment of the condition. Provide patients with special alert card. Patients may self-inject after proper injection training, with physician approval and appropriate medical follow-up. Optimise other concomitant therapies. RA: PsA, AS or nr-axSpA: 40mg dose every other week. RA: MTX should be continued. In monotherapy some patients who experience a decrease in their response to Humira may benefit from an increase to 40mg every week. There may be a need for dose interruption, e.g. before surgery or if serious infection occurs. Re-introduction of Humira after discontinuation for 70 days or longer resulted in the same magnitudes of clinical response and similar safety profiles as before dose interruption. pJIA: Age 2 to 12 years: 24mg/m² body surface area to a maximum single dose of 20mg (for patients aged 2-4) and up to a maximum single dose of 40mg (for patients aged 4-12) administered every other week. The volume for injection is based on the patients' height and weight (see SmPC for height and weight dosing chart). For patients from 13 years: 40mg administered every other week regardless of body surface area. ERA: Age 6 years and older: 24mg/m² body surface area up to a maximum single dose of 40mg every other week. The volume for injection is based on the patients' height and weight (see SmPC). For RA, pJIA, PsA, AS and nr-axSpA, available data suggest that the clinical response is usually achieved within 12 weeks of treatment. Continued therapy should be carefully reconsidered in a patient not responding within this time period. CD: Adults: Induction: 80mg at Week 0 followed by 40mg at Week 2. For a more rapid response, 160mg at Week 0 (4 injections in 1 day or 2 injections / day for 2 consecutive days), 80mg at Week 2, can be used. Note that the risk for adverse events is higher during induction. After induction, the dose is 40mg every other week. If a patient has stopped Humira and signs and symptoms of disease recur, Humira may be re-administered. There is little experience from re-administration after more than 8 weeks since the previous dose. During maintenance treatment, corticosteroids may be tapered in accordance with clinical practice guidelines. Patients experiencing a decrease in their response may benefit from an increase in dosing frequency to 40mg every week. Patients who have not responded by Week 4 may benefit from continued maintenance therapy through Week 12 and should be carefully reconsidered in a patient not responding within this time period. Paediatric CD patients <40kg: Induction: 40mg at Week 0, 20mg at Week 2. For a more rapid response: 80mg at Week 0 (2 injections in 1 day), 40mg at Week 2. Risk of adverse events higher during induction. Maintenance: 20mg every other week. If insufficient response, consider 20mg every week. Treatment beyond 12 weeks should be reconsidered if no clinical response in that time. Paediatric CD patients >40kg: Induction: 80mg Week 0, 40mg at Week 2. For a more rapid response: 160mg at Week 0 (4 injections in 1 day or 2 injections / day for 2 consecutive days), 80mg at Week 2, risk of adverse events higher during induction. Maintenance: 40mg every other week. If insufficient response, consider 40mg every week. Treatment beyond 12 weeks should be reconsidered if no clinical response in that time. Ps: Adult: induction dose of 80mg at week 0, followed by 40mg subcutaneously given every other week from week 1. Continued therapy beyond 16 weeks should be carefully reconsidered in a patient not responding within this time period. Paediatric plaque Ps: Age 4 years and older: 0.6 mg per kg body weight (up to a maximum of 40 mg per dose) administered weekly for the first two doses and every other week thereafter. Continued therapy beyond 16 weeks should be carefully considered in a patient not responding within this time period. The volume for injection is based on the patients' weight (see SmPC). HS: Adults: 160mg initially at Day 1 (4 injections in 1 day or 2 injections / day for 2 consecutive days), followed by 80mg two weeks later at Day 15 (2 injections in 1 day). Two weeks later (Day 29) continue with a dose of 40mg every week. Antibiotics may be continued if necessary. Concomitant topical antiseptic wash on HS lesions should be used on a daily basis. Treatment beyond 12 weeks should be reconsidered if no clinical response in that time. UC: Adults: Induction: 160mg at week 0 (4 injections in 1 day or

injections / day for 2 consecutive days) and 80mg at week 2. Maintenance: 40mg every other week. During maintenance, corticosteroids may be tapered in accordance with clinical practice guidelines. If insufficient response, consider 40mg every week. Treatment beyond 8 weeks should be reconsidered if no clinical response in that time. **Contraindications:** Active TB or other severe infections such as sepsis, and opportunistic infections; moderate to severe heart failure (NYHA class III/IV) and hypersensitivity to adalimumab or any of the excipients. **Precautions and Warnings:** In order to improve traceability of biological medicinal products, the trade name and the batch number of the administered product should be clearly recorded. **Infections:** Patients taking TNF-antagonists are more susceptible to serious infections especially if they have impaired lung function. Monitor for infections, including tuberculosis, before, during and for 4 months after treatment. Treatment should not be initiated in patients with active infections until they are controlled. The risks and benefits of treatment should be considered prior to initiating therapy in patients who have been exposed to tuberculosis or endemic mycoses. New infections during treatment should be evaluated and monitored closely. Treatment should be discontinued for new serious infection or sepsis and treated appropriately. Exercise caution when treating patients with a history of recurring infections or who are predisposed to infections. **Serious infections:** Serious infections, including those with hospitalisation or death have been reported in patients receiving treatment. **Tuberculosis:** Consult SmPC for details. Reactivation and new onset TB, both pulmonary and extra-pulmonary (disseminated) have been reported. Before initiation of therapy all patients must be screened for both active or inactive (latent) TB. If active TB is diagnosed Humira therapy must not be initiated. If latent TB is suspected, a physician with appropriate expertise should be consulted and local treatment recommendations for prophylaxis followed prior to initiation of Humira. Despite prophylaxis TB reactivation has occurred on Humira. **Other opportunistic infections:** Opportunistic infections have been observed in patients receiving Humira. In patients with signs and symptoms of such infections Humira should be discontinued. **Diagnosis and administration of empiric anti-infective therapy:** In these patients should be made in consultation with a physician with appropriate expertise. **Hepatitis B Reactivation:** Reactivation has occurred in chronic carriers (i.e. surface antigen positive) tested for HBV infection before initiating treatment. Carriers should have a consultation with a specialist physician. HBV carriers should be closely monitored for signs and symptoms of active HBV infection throughout therapy and for several months following termination of Humira. If reactivation occurs discontinue treatment and initiate appropriate anti-viral and supportive treatment. **Neurological events:** Humira has a rare association with new onset or exacerbation of clinical symptoms and / or radiographic evidence of central and peripheral nervous system demyelinating disease. Caution is advised when considering Humira in patients with pre-existing or recent onset central or peripheral nervous system demyelinating disorders. **Allergic reactions:** Reports of serious allergic reactions including anaphylaxis have been received. If an anaphylactic reaction or other serious allergic reaction occurs, Humira should be discontinued immediately and appropriate therapy initiated. **Malignancies and lymphoproliferative disorders:** A possible risk of malignancy, including lymphoma and leukaemia, in patients including children and adolescents treated with TNF antagonists cannot be excluded. All patients, and in particular those with a history of extensive immunosuppressant or PUVA treatment, should be monitored for non-melanoma skin cancer prior to and during Humira therapy, caution in COPD patients, as well as in patients with increased risk of malignancies due to heavy smoking. The potential risk with the combination of azathiopurine or 6-mercaptopurine and Humira should be carefully considered (hypatosplenic T-cell lymphoma has occurred). A risk for the development of hepatosplenic T-cell lymphoma in patients treated with Humira cannot be excluded. Caution should be exercised in considering Humira treatment in patients with a history of malignancy. The risk for developing dysplasia or colon cancer is unknown. UC patients and those with a prior history of dysplasia or colon carcinoma should be screened for dysplasia before therapy and throughout their disease course. This evaluation should include colonoscopy and biopsies per local recommendations. **Haematologic reactions:** Adverse events of the haematologic system have been reported with Humira. Patients should be advised to seek immediate medical attention if they develop signs and symptoms of blood dyscrasias. **Vaccinations:** Patients on Humira may receive concurrent vaccinations, (except for live vaccines. Paediatric patients should be brought up to date with all immunisations prior to initiating Humira (see also fertility, pregnancy and lactation section). **Congestive heart failure:** See contraindications. Caution is advised in mild heart failure (NYHA class I/II) and treatment discontinued in patients who develop new or worsening symptoms of congestive heart failure. **Autoimmune processes:** Autoimmune antibodies may form. Discontinue treatment if development of a lupus-like syndrome with positive antibodies against double-stranded DNA. **Surgery:** The long half life of Humira should be considered when a surgical procedure is planned. Patients should be monitored for infections. Small bowel obstruction. Failure to respond to treatment for CD may indicate the presence of fixed fibrotic structure that may require surgical treatment. Data suggests that Humira does not worsen or cause strictures. **Elderly patients:** Serious infections were higher in patients over 65 years of age, some of whom had fatal outcomes. Consider risk of infection. **Interactions:** Combination of adalimumab with other biologic DMARDs (e.g. anakinra and abatacept) or other TNF-antagonists is not recommended. **Fertility, pregnancy and lactation:** Not recommended during pregnancy. Women of childbearing potential should use adequate contraception and continue its use for at least five months after the last Humira treatment. Women must not breast-feed for at least five months after the last treatment. **Side Effects:** The most commonly reported side effects are: Infections, leucopenia, anaemia, lipids increased, headache, abdominal pain, nausea and vomiting, elevated liver enzymes, rash (including exfoliative rash), musculoskeletal pain, injection site reaction. Serious, including fatal, side effects have been reported including infections/sepsis, intestinal perforation, opportunistic infections, TB, endemic mycoses, demyelinating disease, malignancies including lymphoma (including hepatosplenic T-cell lymphoma), leukaemia and skin cancer (including melanoma and Merkel cell carcinoma), cytopenias, worsening heart failure, myocardial infarction, pulmonary embolism, pleural effusion, pulmonary fibrosis, cerebrovascular accident, interstitial lung disease, lupus, Steven-Johnson syndrome, angioedema, anaphylaxis, sarcoidosis, hepatitis, liver failure and worsening of symptoms of dermatomyositis. **Prescribers should consult the SmPC for the other less commonly reported side effects.** Legal Category: POM. **Marketing Authorisation Numbers / Presentations:** Vial: EU/1/03/256/001, Pre-filled Syringe: EU/1/03/256/003, Pre-filled Inven: EU/1/03/256/008. Further information is available from AbbVie Limited, Block B, Lilly Valley Office Campus, Quaryville, Co. Dublin. **HCs are asked to report any suspected adverse reactions via HPR Pharmacovigilance, Earlsfort Terrace, JRL - Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517; Website: www.hpra.ie; E-mail: med.safety@hpra.ie.** Date of revision of PI: July 2015 PI/256/014

TNF=tumour necrosis factor. *In moderate to severe RA. †In adult moderate to severe RA. First patient dosed in April 1997.

References: 1. HUMIRA [Summary of product characteristics]. AbbVie Ltd. 2. Data on File, AbbVie. 3. Data on File, AbbVie. 4. Data on File, AbbVie. 5. Burmester GR, Panaccione R, Gordon KB, et al. Adalimumab: long-term safety in 23 458 patients from global clinical trials. *Ann Rheum Dis.* 2013 Apr; 72(4): 517-524. 6. Data on File, AbbVie.

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Date of Preparation: August 2015 IREHUM140419y(1)

 **HUMIRA**
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Speakers

Dr Xenofon Baraliakos

Ruhr-University Bochum, Cologne Area,
Germany



Dr Baraliakos studied human medicine in Magdeburg and Berlin, Germany from 1994 to 2000, and went on to receive a PhD degree in 2005 with a thesis entitled "MRI examinations of the spine in patients with ankylosing spondylitis before and after therapy with the monoclonal anti-TNF- α antibody infliximab". He has been a researcher in the field of spondyloarthritides at Rheumazentrum Ruhrgebiet in Herne, Germany since 2003.

He has received his official Board degree in orthopaedic surgery in 2007 and in Internal Medicine and Rheumatology in 2014. Among others, Dr. Baraliakos won the EWRR Award, in 2005, the EULAR Young Investigator Award, in 2006 and 2008, the German patient's AS Society Award in 2010 and the 2014 Award for Excellence in Clinical Research from the European Society for Clinical Investigations.

Dr. Baraliakos is a member of the German Society of Rheumatology, the American College of Rheumatology, the Assessment of Spondyloarthritis International Society (ASAS) and the Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA). He also acts as a Reviewer for all major rheumatologic journal and is a member of the Editorial Board of the Journal of Rheumatology, RMD Open, BMJ Open and Nature Reviews Rheumatology. His research interests include clinical and academic research in the field of spondyloarthritides, with special emphasis on imaging outcomes and treatment of the disease.

Prof Fergus Shanahan

Alimentary Pharmabiotic Centre, UCC



Fergus Shanahan MD, DSc, is Professor and Chairman of the Department of Medicine and Director of the APC Microbiome Institute at University College Cork (UCC). The APC investigates host-microbe interactions in health and disease, now has a membership of over 160 staff, scientists and students, and is funded by Science Foundation Ireland and by research alliances with companies within the food and pharmaceutical sectors. Dr. Shanahan attended medical school at University College Dublin. After internship and residency at the Mater hospital, he completed fellowships in clinical immunology at McMaster University, Canada, and in gastroenterology at University of California, Los Angeles (UCLA). At UCLA he rose to the rank of Associate Professor with tenure before returning to Ireland in 1993. Dr. Shanahan has published over 450 scientific papers and has co-edited several books. He has also published several articles on the medical humanities, including an award winning essay entitled 'Waiting'. He is a Fellow of the Royal College of Physicians in Ireland, Canada, and the United Kingdom as well as of the American College of Physicians. He is a former President of the Irish Society of Gastroenterology, was named to the "Irish Life Science 50" a list of the top 50 Irish and Irish Americans in the life science industry, and recently was awarded the Irish Society of Immunology medal and public lecture award. In 2013, Science Foundation Ireland named him as its Researcher of the Year. His interests include mucosal immunology, gut microbiota, inflammatory bowel disease, and most things that affect the human experience.

Dr Suresh Rattan

Aarhus University, Denmark



Suresh Rattan, Ph.D., D.Sc., leads the Laboratory of Cellular Ageing, at the Department of Molecular Biology and Genetics, Aarhus University, Denmark. His research areas and expertise include ageing of human cells, and application of the concept of mild stress-induced hormesis as a modulator of ageing. He is the recipient of the Lord Cohen Medal in Gerontology from the British Society for Research on Ageing (BSRA), and an Honorary Doctorate from the Russian Academy of Medical Sciences (St. Petersburg). He has published 230 scientific articles, and has edited/co-edited 13 books, including books for children, general public and research scientists. He is the Editor-in-Chief of Biogerontology – an international peer reviewed journal, published by Springer. He is the present Chairman of the Biological Section of the European Region of the International Association of Gerontology and Geriatrics (IAGG-ER).

Dr Aubrey Bell

formerly at Musgrave Park Hospital, Belfast



MB 1976, Undergrad prizes, MRCP (UK) 1981, MD (thesis) 1984, FRCP (Ed, Lond) 1994
Research Fellow University Edinburgh under George Nuki 1981-2

Consultant Rheumatologist, Belfast HSC Trust and Senior Lecturer in Rheumatology at Queen's University 1987-2012

Main clinical interests have been in lupus, autoimmune rheumatic diseases and musculoskeletal ultrasound, with related research interests. Directed the Lupus Clinic at the Belfast Trust and NI Lupus Research Group. Scientific publications encompass laboratory and clinical aspects of Lupus, RA and related disorders. Educational Interests: Past NICPMDE Director in Rheumatology; initiated the first Northern Ireland Regional SPR Rheumatology Training Programme 1996-2002

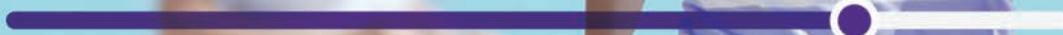
Member Royal College (London) Rheumatology SAC Undergraduate Education. Established first integrated undergraduate musculoskeletal course at Queen's University. Head of assessment 3rd year Medicine

Previously President ISR, Member: Association of Physicians of Great Britain and Ireland, Corrigan Club. Served on various committees on BSR, ARC, and Arthritis Care. Patron of Lupus UK (NI)

Served on Editorial Board of Annals of Rheumatic Disease.

12 weeks of psoriatic arthritis control for

Play without pause



After 2 starter doses, 1 dose of Stelara® every 12 weeks can reliably control the signs and symptoms of psoriatic arthritis.¹

STELARA® solution for injection in pre-filled syringe

PRESCRIBING INFORMATION. ACTIVE INGREDIENT(S): Ustekinumab

Please refer to Summary of Product Characteristics (SmPC) before prescribing.

INDICATION(S): **Plaque psoriasis:** Treatment of moderate to severe plaque psoriasis in adults who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapies including ciclosporin, methotrexate or PUVA. **Psoriatic arthritis:** Alone or in combination with methotrexate for the treatment of active psoriatic arthritis in adult patients when the response to previous non-biological disease-modifying anti-rheumatic drug (DMARD) therapy has been inadequate. **DOSE & ADMINISTRATION:** Under the guidance and supervision of a physician experienced in diagnosis and treatment of psoriasis or psoriatic arthritis. Subcutaneous injection. Avoid areas with psoriasis. For self-injecting patients ensure appropriate training, follow-up and monitoring during treatment. **Plaque psoriasis, adults & elderly:** Patients ≤ 100kg, 45 mg at week 0 followed by a 45 mg dose at week 4, then every 12 weeks. Patients >100 kg, 90 mg at week 0 followed by a 90 mg dose at week 4, then every 12 weeks (45 mg was less effective in these patients). **Psoriatic arthritis, adults & elderly:** 45 mg at week 0 followed by a 45 mg dose at week 4, then every 12 weeks. Alternatively, 90 mg may be used in patients with a body weight >100 kg. Consider discontinuation if no response after 28 weeks. **Children <18 years:** Not recommended. **Renal & Hepatic impairment:** Not studied. **CONTRAINDICATIONS:** Hypersensitivity to product; clinically important, active infection. **SPECIAL WARNINGS & PRECAUTIONS: Infections:** Potential to increase risk of infections and reactivate latent infections. Caution in patients with a chronic infection or history of recurrent infection, particularly TB. Patients should be evaluated for tuberculosis prior to initiation of STELARA. Consider anti-tuberculosis therapy prior to initiation of STELARA in patients with past history of latent or active tuberculosis. Patients should seek medical advice if signs or symptoms suggestive of an infection occur. If a serious

infection develops, they should be closely monitored and STELARA should not be administered until infection resolves. **Malignancies:** Potential to increase the risk of malignancy. No studies in patients with a history of malignancy or in patients who develop malignancy while receiving STELARA. Monitor all patients, in particular those older than 60, patients with a medical history of prolonged immunosuppressant therapy or those with a history of PUVA treatment for non-melanoma skin cancer. **Concomitant immunosuppressive therapy:** Caution, including when changing immunosuppressive biologic agents. **Hypersensitivity reactions:** Serious hypersensitivity reactions (anaphylaxis and angioedema) reported, in some cases several days after treatment. If these occur appropriate therapy should be instituted and, STELARA discontinued immediately. **Latex sensitivity:** Needle cover contains natural rubber (latex), may cause allergic reactions. **Immunotherapy:** Not known whether STELARA affects allergy immunotherapy. **Serious skin conditions:** Exfoliative dermatitis has been reported following treatment. Discontinue STELARA if a drug reaction is suspected. **SIDE EFFECTS: Common:** dental infections, upper respiratory tract infection, nasopharyngitis, dizziness, headache, oropharyngeal pain, diarrhoea, nausea, pruritus, back pain, myalgia, arthralgia, fatigue, injection site erythema, injection site pain, antibodies to ustekinumab. **Other side effects include:** cellulitis, serious hypersensitivity reactions (including anaphylaxis, angioedema), skin exfoliation, exfoliative dermatitis. **Refer to SmPC for other side effects. FERTILITY:** The effect of ustekinumab has not been evaluated. **PREGNANCY:** Should be avoided. Women of childbearing potential: Use effective contraception during treatment and for at least 15 weeks post-treatment. **LACTATION:** Limited data in humans. **INTERACTIONS:** *In vitro*, STELARA had no effect on CYP450 activities. **Vaccinations:** Live vaccines should not be given concurrently with STELARA, and should be withheld for at least 15 weeks after last dose of STELARA. STELARA can resume at least 2 weeks after such vaccinations. No data on

secondary transmission of infection by live vaccines in patients receiving STELARA. **Concomitant immunosuppressive therapy:** Psoriasis: The safety and efficacy of STELARA in combination with other immunosuppressants, including biologics, or phototherapy have not been evaluated. **Refer to SmPC for full details of interactions. LEGAL CATEGORY:** Prescription Only Medicine. **PRESENTATIONS, PACK SIZES, MARKETING AUTHORISATION NUMBER:** 45mg: 1 x 0.5ml pre-filled syringe. EU/1/08/494/003. 90mg: 1 x 1.0ml pre-filled syringe. EU/1/08/494/004. **MARKETING AUTHORISATION HOLDER:** JANSSEN-CILAG INTERNATIONAL NV, Turnhoutseweg 30, B-2340 Beerse, Belgium. **FURTHER INFORMATION IS AVAILABLE FROM:** Janssen-Cilag Ltd, 50 – 100 Holmers Farm Way, High Wycombe, Buckinghamshire, HP12 4EG UK. © Janssen-Cilag Ltd 2014. Prescribing information last revised: 11/2014

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. **Healthcare professionals are asked to report any suspected adverse events via:**
–HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2,
Tel: +353 1 6764971, Fax: +353 1 6762517, Website: www.hpra.ie,
E-mail: medsafety@hpra.ie

Adverse events should also be reported to Janssen-Cilag Ltd on +44 1494 567447.

References: 1. Stelara SMPC available from www.medicines.ie

Date of preparation: February 2015
PHIR/STE/0913/0002a(1)a





Prof Gerd Burmester

Charitéplatz 1, Berlin.

Director, Department of Rheumatology and Clinical Immunology, Charité - University Medicine Berlin, Germany, since 1993
Director, Charité-Center of Internal Medicine and Dermatology, since 2006



Gerd R. Burmester, MD is Professor of Medicine in the Department of Rheumatology and Clinical Immunology at the Charité University Hospital, Free University and Humboldt University of Berlin, Germany.

Professor Burmester earned his medical degree from Hannover Medical School and completed a residency at the Medical School of the University of Erlangen-Nuremberg. He was awarded a postdoctoral fellowship at Rockefeller University in New York, and was a visiting scholar at the Hospital for Joint Diseases, Mount Sinai School of Medicine, New York, New York.

Professor Burmester is the recipient of numerous awards, including the Jan van Breemen Medal of the Dutch Society of Rheumatology and the Carol-Nachman Prize for Rheumatology. He serves on several editorial boards, including the Journal of Rheumatology and Clinical Rheumatology, and he is the Associate Editor of Annals of the Rheumatic Diseases, official journal of EULAR. The author himself of more than 600 original and review articles, Professor Burmester's research interests include rheumatoid arthritis, Lyme borreliosis, immunotherapy, cellular activation mechanisms in inflammatory joint diseases, and tissue engineering. Professor Burmester served as President of the German Society of Rheumatology from 2001-2002. He was a Member of the Executive Committee of the European League against Rheumatism from 2003-2006 acting as Chairman of the Standing Committee on Investigative Rheumatology and became an honorary member of EULAR in 2006. From 2011 – 2013 he served as Treasurer of EULAR, and he was elected President Elect of EULAR in 2013.

Research Interests:

Rheumatoid Arthritis, Immunotherapy, Biomarkers, Cellular Activation Mechanisms in Inflammatory Joint Diseases, Tissue Engineering

Publications:

665 publications listed in PubMed (as of June 2015, <http://www.ncbi.nlm.nih.gov/pubmed/?term=burmester-g>)

Prof. Donal O'Shea

St Vincent's University Hospital and St Columcille's Hospital

Prof Donal O'Shea qualified in Medicine from UCD in 1989. He moved to Hammersmith Hospital in London in 1992 and completed his MD on how the brain controls appetite and hunger - funded by the Wellcome Trust Training Fellowship. In 1996 Donal was appointed a Senior Lecturer in Diabetes and Endocrinology at Hammersmith Hospitals Trust. In 1999 he moved to his current position and set up the first hospital based multidisciplinary treatment unit for obesity in Ireland. Prof O'Shea was a member of the Department of Health National Obesity Taskforce, chairing the detection and treatment subgroup. He is currently Chairman of the Nutrition Council of the Irish Heart Foundation and has a research programme looking at the overlap between fat cell function and the



metabolic/immune systems focussing on the patients having surgery for their obesity. Donal is on the executive of the UK and Ireland Neuroendocrine Tumour Society and has published on diabetes, gut endocrine obesity, steroid metabolism, gender identity disorder and thyroid disorders. Donal is a Consultant Endocrinologist at St Columcilles and St Vincents University Hospitals and Associate Professor of Medicine at University College Dublin.

Prof Gerry Wilson

University College, Dublin



Professor Gerry Wilson graduated in Medicine from Queen's University Belfast. He was awarded an ARC Clinical Fellowship for a PhD thesis which he undertook at the University of Sheffield. He was subsequently awarded an ARC Copeman Fellowship for research at Stanford University. He was appointed Professor in Rheumatology and Honorary Consultant Rheumatologist at the University of Sheffield Medical School and Sheffield Teaching Hospitals NHS Foundation Trust where he was Head of the Sheffield EULAR Centre of Excellence for Rheumatology. Prof Wilson was appointed to the Arthritis Ireland/UCD Chair of Rheumatology in 2013. Research interests include genetic and epigenetic influences in RA.

Speakers IRHPS

Colin Dunlevy

PhD, MISCP, St Columcille's Hospital, Loughlinstown



Colin Dunlevy has worked in the weight management service at St Columcille's Hospital, Loughlinstown since 2008. In this role he is involved in the management of obesity related co-morbidities and behavioural lifestyle change. He graduated as a physiotherapist from Trinity College Dublin in 2000 having had a previous career in information technology. Postgraduate research in the area of joint kinematics was continued at Trinity and a PhD was awarded in 2005. He has worked in AMNCH and the Central Remedial Clinic (CRC) and continues to work in musculoskeletal private practice and as a team physiotherapist with the FAI from all levels from U15s to the senior international team.

Mary Ryan

St Columcille's Hospital, Loughlinstown



Mary Ryan has worked in the weight management/diabetes service at St Columcille's Hospital, Loughlinstown since 2008. In this role she has been involved in the management of obesity related co-morbidities and behavioural lifestyle change. She graduated as a nurse from University College Paisley, Scotland in 1997. Postgraduate Masters Degree was done in Dublin Business School and she graduated in 2004. She has worked in SJH and in the private industry as a diabetes nurse specialist.



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Natalie Wallace

Senior Dietitian, MINDI



Natalie qualified from TCD/DIT with a BSc (Human Nutrition and Dietetics) in 2005. She began her career in the diabetes and weight management service at St Columcille's Hospital, Loughlinstown, where she worked for one year before taking up a post in St. James' Hospital, Dublin. This was followed by a permanent post in St Vincent's University Hospital, Dublin where she worked for 7 years mainly covering the areas of surgery and diabetes. Her current role is Senior Dietitian specialising in diabetes and weight management in the Endocrine Service at St Columcille's Hospital. She is a member of the Nutrition and Dietetic Institute and has been an active participant of the Nutrition Support, Diabetes and Weight Management interest groups.

ISR Board members

Professor David Kane

Prof David Kane attended medical school at Trinity College, Dublin, Ireland and was conferred MB BCh BAO BA in 1991, PhD in 2002 and FRCPI in 2006. He has trained in rheumatology with Prof. Barry Bresnihan and Prof. Oliver FitzGerald at St. Vincent's University Hospital, Dublin, Ireland and with Prof Roger Sturrock, Prof Iain McInnes and Dr Peter Balint at Glasgow Royal Infirmary, Glasgow, United Kingdom. He was appointed as Senior Lecturer in Rheumatology at the University of Newcastle (2003-2005) and is currently working as Consultant Rheumatologist at the Adelaide and Meath Hospital and Clinical Professor in Rheumatology at Trinity College Dublin. His special interests are musculoskeletal ultrasound, spondyloarthritis and synovial inflammation. He is a member of the European Working Party on Musculoskeletal Ultrasound and the OMERACT special interest group on musculoskeletal ultrasound, previous organiser of the BSR Musculoskeletal Ultrasound course and is Faculty member of the EULAR Musculoskeletal ultrasound course. He has served as a Board member of the Irish Osteoporosis Society, as Treasurer of the Irish Society for Rheumatology and is currently a Board member of Arthritis Ireland.



Dr Frances Stafford

Frances is a graduate of UCD, spent almost a decade in North America, training in Rheumatology first at University of Toronto, followed by a fellowship at Massachusetts General Hospital & Harvard Medical School. She was awarded a 4 year Arthritis Foundation Postdoctoral Fellowship, which I completed at the NIH, and then went on staff at the NIH. Frances is American Board Certified in Internal Medicine and in Rheumatology. She has been Consultant at Blackrock Clinic since 1995.



Dr Sinéad Harney

Dr Sinéad Harney graduated from UCG in 1994 and did her specialist training in Rheumatology and General Medicine in Dublin. She completed her training in Oxford in 2005 and was awarded a DPhil by thesis titled "Major Histocompatibility Genetics of



Rheumatoid Arthritis". She was appointed to a Consultant Rheumatologist post in Cork University Hospital in 2005 and has worked there since. She completed a Masters in Sports and Exercise Medicine in UCC in 2007. Her research interests include – Genetics of inflammatory arthritis and occult cardiovascular disease in Rheumatoid Arthritis and she has over 90 publications. She is currently the treasurer of the Irish Society of Rheumatology and a board member of the TUE committee of the Irish Sports Council.

Dr Suzanne Donnelly

Dr Suzanne Donnelly graduated from Trinity College Dublin, trained in Ireland and England and was appointed consultant rheumatologist at St. George's Hospital and Medical School, London in 2002. She returned to Ireland in 2005 to work part time as Consultant Rheumatologist in the Mater Misericordiae University Hospital. Her clinical and educational research interests include systemic autoimmune disease, Systemic Lupus Erythematosus and Care in Medicine. Suzanne has held academic posts in medical education since 1996 including in Trinity College Dublin; the University of Oxford and in London, and joined UCD as Director of Clinical Education in 2008, to lead the development of early clinical education. She was responsible for a series of innovative educational strategies across all disciplines including the development of a patient educator programme in association with Arthritis Ireland. She led the first national undergraduate curriculum project in Ireland, published as the ISR Undergraduate Curriculum in Rheumatology in 2009, and is a contributing author to the textbooks Medicine at A Glance & The Rheumatology Handbook. She was ISR nominee to the board of Arthritis Ireland (2008-13), a board member of Raynauds and Scleroderma Ireland (2007-10) and is a medical patron of Lupus Group Ireland.



Dr Sandy Fraser

Consultant Rheumatologist, General Physician and Honorary Senior Lecturer, University Hospitals Limerick. Dr. Alexander Fraser graduated in medicine from Trinity College Dublin in 1991. He began practicing Rheumatology in 1996 and the following year was appointed Specialist Registrar in Rheumatology at the Yorkshire Deanery. Training with Professor Emery's group in Leeds he developed a research interest in clinical, immunological and therapeutic aspects of Rheumatoid Arthritis, Psoriatic Arthritis and the Sero-negative Spondyloarthropathies. He was appointed Consultant Rheumatologist and Honorary Senior Lecturer at the Leeds Teaching Hospitals NHS Trust, working at The Leeds General Infirmary and St. James' University Hospital in October 2001, and working closely with Professor Emery and Professor Doug Veale he published in the area of Angiogenesis, Vascularity and Inflammation in early and established arthritis and Biomarkers of cartilage turnover. Dr Fraser took up his current appointment as Consultant Rheumatologist, General Physician and Honorary Senior Lecturer at the University Hospitals Limerick in 2006. In conjunction with the University of Limerick Graduate Entry Medical School (GEMS) Dr. Fraser and his team have continued their strong academic interests while managing a busy clinical practice.



CLARITY IN THE TREATMENT PLAN - RIGHT FROM THE START



cimzia[®]
(certolizumab pegol)

For patients with Rheumatoid Arthritis, Psoriatic Arthritis or Axial Spondyloarthritis

RA
RHEUMATOID ARTHRITIS[®]

◦ **Rheumatoid arthritis:** Cimzia[®], in combination with methotrexate (MTX), is indicated for the treatment of moderate to severe, active rheumatoid arthritis (RA) in adult patients when the response to disease-modifying antirheumatic drugs (DMARDs) including methotrexate, has been inadequate.

PsA
PSORIATIC ARTHRITIS[®]

◦ **Psoriatic arthritis:** Cimzia[®], in combination with MTX, is indicated for the treatment of active psoriatic arthritis in adults when the response to previous DMARD therapy has been inadequate.

axSpA
AXIAL SPONDYLOARTHRTIS[®]

◦ **Axial spondyloarthritis:** Cimzia[®] is indicated for the treatment of adult patients with severe active axial spondyloarthritis.

PRESCRIBING INFORMATION

(Please consult the Summary of Product Characteristics (SPC) before prescribing.)

Cimzia[®]

Certolizumab Pegol

Active Ingredient: Pre-filled syringe contains 200 mg certolizumab pegol in one ml.

Indication(s): *Rheumatoid arthritis (RA):* Cimzia, in combination with methotrexate (MTX), is indicated for the treatment of moderate to severe, active RA in adult patients when the response to disease-modifying antirheumatic drugs (DMARDs) including MTX, has been inadequate. Cimzia can be given as monotherapy in case of intolerance to MTX or when continued treatment with MTX is inappropriate. Cimzia has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function, when given in combination with MTX.

Axial spondyloarthritis: Cimzia is indicated for the treatment of adult patients with severe active axial spondyloarthritis, comprising:

Ankylosing spondylitis (AS): Adults with severe active ankylosing spondylitis who have had an inadequate response to, or are intolerant to nonsteroidal anti-inflammatory drugs (NSAIDs).

Axial spondyloarthritis without radiographic evidence of AS: Adults with severe active axial spondyloarthritis without radiographic evidence of AS but with objective signs of inflammation by elevated CRP and/or MRI, who have had an inadequate response to, or are intolerant to NSAIDs.

Psoriatic arthritis: Cimzia in combination with MTX, is indicated for the treatment of active psoriatic arthritis in adults when the response to previous DMARD therapy has been inadequate. Cimzia can be given as monotherapy in case of intolerance to MTX or when continued treatment with MTX is inappropriate.

Dosage and Administration: Treatment should be initiated and supervised by specialist physicians experienced in the diagnosis and treatment of conditions for which Cimzia is indicated in adult patients. Patients should be given the special alert card. For RA and psoriatic arthritis MTX should be continued during treatment with Cimzia where appropriate.

Loading dose: The recommended starting dose is 400 mg (given as 2 subcutaneous injections of 200 mg each) at weeks 0, 2 and 4.

Maintenance dose: RA and Psoriatic Arthritis: The recommended maintenance dose is 200 mg every 2 weeks. Once clinical response is confirmed, an alternative maintenance dose of 400 mg every 4 weeks can be considered. *Axial spondyloarthritis:* The recommended maintenance dose is 200 mg every 2 weeks or 400 mg every 4 weeks. For the above indications continued therapy should be carefully reconsidered in patients who show no evidence of therapeutic benefit within the first 12 weeks of treatment.

Missed dose: Advise patients to inject the next dose as soon as they remember and inject

subsequent doses as originally instructed.

Paediatric population (18 years old): Not recommended. Consult SPC for further information.

Contraindications: Hypersensitivity to the active substance or to any of the excipients; active tuberculosis or other severe infections such as sepsis or opportunistic infections; moderate to severe heart failure (NYHA classes III/IV).

Precautions: Prior to treatment with Cimzia all patients to be appropriately screened for tuberculosis, e.g. tuberculin skin test and chest X-ray (local recommendations may apply) and results recorded on the patient alert card. False negative tuberculin skin test results are possible in severely ill or immunocompromised patients. Do not initiate treatment in cases of latent tuberculosis, clinically important active infection, including chronic or localised infections until the infection is controlled. In patients with a past history of latent tuberculosis use of anti-tuberculosis therapy must be started before initiation of Cimzia. Evaluate and monitor patients closely for signs and symptoms of infections including chronic and local infections and active and latent tuberculosis. Treatment must not be initiated until infection is controlled. Some patients who have been successfully treated for active tuberculosis have redeveloped tuberculosis while being treated with Cimzia. Monitor patients closely for signs of infection during and up to 5 months after treatment in order to minimise delay in diagnosis and treatment. Serious infections (including sepsis, tuberculosis, miliary tuberculosis, disseminated and extrapulmonary disease) and opportunistic infections (including histoplasmosis, nocardia, candidiasis) have been reported with some fatal outcomes. Caution is advised in patients with a history of recurring or opportunistic infections including those on concomitant corticosteroid or immunosuppressive medications or elderly. Patients should be tested for HBV infection before initiating treatment with Cimzia and if treated should be continually monitored. In patients receiving TNF antagonists, HBV reactivation has occurred in chronic carriers with some fatal outcomes. Cimzia should be discontinued and effective antiviral therapy and appropriate supportive treatments initiated. There is an increase in background risk for lymphoma and leukaemia in patients with long-standing highly active RA. Periodic skin examination is recommended particularly for patients with risk factors for skin cancer. Exercise caution when initiating TNF antagonist therapy in patients with a history of malignancies and when considering continuing treatment if patients develop lymphoma, leukaemia, mild congestive heart failure and demyelinating disorders such as multiple sclerosis. Advise patients to seek immediate medical attention if they develop signs and symptoms suggestive of tuberculosis, blood dyscrasias or infection. Discontinue treatment if patients develop significant haematological abnormalities including aplastic anaemia, leukopenia, pancytopenia, thrombocytopenia; lupus-like syndrome; mild congestive heart failure and demyelinating disorders such as multiple sclerosis. There is a potential risk of worsening of congestive heart failure with TNF antagonists including Cimzia. As for all TNF antagonists COPD and heavy smoking may put patients at greater risk of malignancies.

Patients receiving Cimzia may receive vaccination except live vaccines. Live vaccines should not be administered concurrently with Cimzia. The 14 day half-life of certolizumab pegol should be taken into account prior to planned surgical procedures. Cimzia may cause erroneously elevated (aPTT) assay results in patients without coagulation abnormalities.

Interactions: The combination of Cimzia and anakinra or abatacept is not recommended.

Pregnancy and lactation: Cimzia is not recommended in pregnancy or breast-feeding. Women of childbearing potential should use adequate contraception up to 5 months after the last administered dose.

Driving etc.: Cimzia may have a minor influence on the ability to drive and use machines. Dizziness may occur following administration. Caution is advised.

Adverse Effects: Common adverse-effects (+ 1/100 to <1/10): Bacterial infections (including abscess) and viral infections (including herpes zoster, papillomavirus and influenza), eosinophilic disorders, leukopenia (including neutropenia, lymphopenia), headaches (including migraine), sensory abnormalities, hypertension, nausea, hepatitis (including hepatic enzyme increased), rash, pyrexia, pain (any site), asthenia, pruritus (any site), injection site reactions. **Consult SPC in relation to other side effects.** Pharmaceutical Precautions: Store in refrigerator (2°-8°C). Do not freeze. Keep the pre-filled syringe in the outer carton in order to protect from light.

Legal Category: POM

Marketing Authorisation Number(s): EU/1/09/544/001

UK NHS Cost : £357.50 per syringe (200 mg)

Marketing Authorisation Holder:

UCB Pharma S.A., Allée de la Recherche 60, 1070 Brussels, Belgium.

Further information is available from:

UCB Pharma Ltd, 208 Bath Road, Slough, Berkshire, SL1 3WE.

Tel: +44 (0)1753 534655. Fax: +44 (0)1753 536632.

UCB (Pharma) Ireland Ltd, United Drug House, Magna Drive,

Magna Business Park, City West Road, Dublin 24, Ireland

Tel: +353 14637395 Fax: +353 14637396

Email: medicalinformationuk@ucb.com

Date of Revision: 11/2014 (UK/14C10101).

Cimzia is a registered trademark.

UK Specific Information

Adverse events should be reported. Reporting forms and information can be found at www.mhra.gov.uk/yellowcard Adverse events should also be reported to UCB Pharma Ltd.



Dr Donough Howard

Donough Howard is a Consultant Rheumatologist at St James's Hospital and Hermitage Medical Clinic. Dr Howard is the national specialty director for rheumatology. He graduated from RCSI and completed postgraduate training both in Ireland and the US. He previously worked in Lahey Clinic Medical Centre, with academic appointments to both Harvard and Tufts Medical Schools.



Dr Howard has published in the fields of vasculitis and also has subspecialty interests in the fields of scleroderma.

Dr Gary Wright

Dr Wright qualified from Queens University in 1987 and was appointed Consultant Rheumatologist at the Royal Victoria Hospital and Musgrave Park Hospitals in Belfast in 1998. He is an Honorary Clinical lecturer at Queen's University Belfast. He trained in Rheumatology in Belfast and spent a further year as Honorary Senior Registrar in Nottingham with Professor Mike Doherty.



His Research interests include the genetics of osteoarthritis and crystal disease, early diagnosis and treatment of inflammatory arthritis and musculoskeletal ultrasound in rheumatic disorders.

Dr Orla Killeen

Dr Orla Killeen qualified from UCG (NUI) Galway in 1996. She trained in General Paediatrics in Our Lady's Hospital for Sick Children, Crumlin and in Temple Street University Hospital, Dublin before sub-specialising in Paediatric Rheumatology. She undertook her paediatric rheumatology training at Great Ormond Street Children's Hospital, London and went on to complete a Barbara Ansell Fellowship in Paediatric Rheumatology in the Royal Hospital for Sick Children, Glasgow. She was appointed as Ireland's first Paediatric Rheumatologist in 2004, and is based at Our Lady's Children's Hospital, Crumlin and St Vincent's University Hospital, Dublin since July 2006. She is the Clinical lead for the National Centre for Paediatric Rheumatology (NCPR), providing care for patients both on a local and national level up to 18 years of age. Her areas of interest include Adolescent Rheumatology Transition Care as well as JIA, Down's arthropathy and Auto-Inflammatory syndromes.



Eamonn Molloy

Eamonn Molloy graduated from University College Dublin (1997) and completed rheumatology and internal medicine training in Ireland. He obtained an MD at RCSI (2006), which focused on calcium crystal induced inflammation. From 2005, he underwent subspecialty fellowship training in vasculitis at the Cleveland Clinic, completed a MS (Clinical Research) at Case Western Reserve University and then joined the staff at the Vasculitis Center and RJ Fasenmeyer Center for Clinical Immunology at the Cleveland Clinic. In 2010, he was appointed as a consultant rheumatologist at St Vincent's University Hospital and is a UCD Senior Clinical Lecturer. He is the author of approximately 50 publications largely pertaining to vasculitis, complications of biologic therapy and crystal induced arthritis. Currently, his primary research focus is giant cell arteritis.



Dr John Stack

(SPR Rep)

John Stack is this years SpR representative on the ISR committee. He is a 4th year rheumatology SpR currently based at Connolly Hospital Blanchardstown and has previously worked at St James Hospital, Midlands Regional Hospital Mullingar and Cork University Hospital. He is a graduate of University College Cork.



Dr Clare Matthews and Adrian Pendleton are members of the ISR Board

Young Investigator Award 2015

Dr Cara McDonagh graduated from University College Dublin in 1998 and complete her pre- registration training in the Mater Misericordiae Hospital. She undertook residency training in medicine in The Princess Alexandra Hospital in Brisbane, Australia and then specialist paediatric training in the Royal Children's hospital also in Brisbane. Having worked in paediatric rehabilitation medicine in Australia, on returning to Ireland she did a registrar rotation in the National Rehabilitation Hospital and in 2008 Dr McDonagh commenced specialist registrar training in Rehabilitation Medicine. To build on an interest in physical medicine and musculoskeletal ultrasound, Dr McDonagh took a research and clinical position with Prof. David Kane in the rheumatology department in Tallaght Hospital. Under Prof. Kane's mentorship Dr McDonagh conducted research looking at the median nerve in carpal tunnel syndrome using existing and novel technology in musculoskeletal ultrasound. This research has formed part of an MD thesis that has been submitted to Trinity College Dublin. Dr McDonagh is currently working as a consultant in spinal cord injury at the National Rehabilitation Hospital.



ISR SPRING MEETING 2016
Friday 15th April 2016,
to be held in
Rochestown Park Hotel, Cork

Adenuric[®]

(febuxostat)

Treat to target. Daily.¹

ADENURIC 80 mg and 120 mg film-coated tablets: Abbreviated Prescribing Information Please consult the Summary of Product Characteristics (SmPC) for full prescribing information.

Presentation: Film-coated tablets containing 80 mg or 120 mg febuxostat. Also contains lactose monohydrate. **Use:** Treatment of chronic hyperuricaemia in conditions where urate deposition has already occurred (including a history, or presence of, tophus and/or gouty arthritis) in adults.

Dosage and administration: Oral use with or without food. Recommended dose is 80 mg once daily. If serum uric acid is > 6 mg/dL (357 µmol/L) after 2-4 weeks, 120 mg once daily may be considered. **Older people:** No dose adjustment required. **Renal impairment:** No dosage adjustment necessary in patients with mild or moderate renal impairment. Efficacy and safety not fully evaluated in patients with severe renal impairment. **Hepatic impairment:** Recommended dosage in patients with mild hepatic impairment is 80 mg. Limited information available in patients with moderate hepatic impairment. Efficacy and safety has not been studied in patients with severe hepatic impairment. **Children and adolescents:** Safety and efficacy in children under 18 has not been established. **Organ transplant recipients:** No experience therefore not recommended. **Contraindications:** Hypersensitivity to the active ingredient or to any of the excipients. **Warnings and precautions:** **Cardio-vascular disorders: Not recommended in patients with ischaemic heart disease or congestive heart failure.** **Product allergy/hypersensitivity:** Advise patients of signs/symptoms of allergic/hypersensitivity reactions and monitor closely for symptoms. Stop treatment immediately if serious reactions occur, including Stevens-Johnson syndrome, Toxic epidermal necrolysis and acute anaphylactic reaction/shock; do not re-start febuxostat at any time. Severe hypersensitivity reactions, including Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS) associated with fever, haematological, renal or hepatic involvement in some cases. **Acute gouty attacks (gout flare):** Do not start treatment until an acute attack of gout has completely subsided. As with other urate lowering medicinal products, gout flares may occur during initiation of treatment. At treatment initiation flare prophylaxis for at least 6 months with an NSAID or colchicine is recommended. If a gout flare occurs during treatment, do not discontinue. Manage the gout flare concurrently as appropriate. Continuous treatment decreases frequency and intensity of gout flares.

Xanthine deposition: As with other urate lowering medicinal products, in patients in whom the rate of urate formation is greatly increased (e.g. malignant disease and its treatment, Lesch-Nyhan syndrome), the absolute concentration of xanthine in urine could, in rare cases, rise sufficiently to allow deposition in the urinary tract. As there has been no experience, febuxostat is not recommended for use in these populations. **Mercaptopurine/azathioprine:** Not recommended in patients concomitantly treated with mercaptopurine/azathioprine. Where combination cannot be avoided, monitor patients closely. Dose reduction for mercaptopurine/azathioprine is recommended. **Theophylline:** No pharmacokinetic interaction shown with febuxostat 80 mg, no data for 120 mg. **Liver disorders:** Liver function test is recommended prior to the initiation of therapy and periodically thereafter based on clinical judgement. **Thyroid disorders:** Caution in patients with alteration of thyroid function. **Lactose:** Contains lactose. Patients with rare hereditary problems of galactose intolerance, the Lapp lactase deficiency or glucose-galactose malabsorption should not take this medicine. **Interactions:** **Mercaptopurine/azathioprine:** On the basis of the mechanism of action of febuxostat on xanthine oxidase inhibition concomitant use is not recommended. No data is available regarding the safety of febuxostat during cytotoxic chemotherapy. **Rosiglitazone/CYP2C8 inhibitors:** No dosage adjustment required. **Theophylline:** No special caution advised for 80 mg febuxostat, no data available for 120 mg. **Naproxen and other inhibitors of glucuronidation:** Can be co-administered with naproxen with no dose adjustments necessary. **Inducers of glucuronidation:** Monitoring of serum uric acid is recommended 1-2 weeks after start of treatment with a potent inducer of glucuronidation. Cessation of treatment of an inducer might lead to increased plasma levels of

febuxostat. **Colchicine/indometacin/hydrochlorothiazide/warfarin:** Can be co-administered with colchicine or indometacin with no dose adjustments necessary. No dose adjustment necessary when administered with hydrochlorothiazide. No dose adjustment necessary for warfarin when administered with febuxostat. **Desipramine/CYP2D6 substrates:** Co administration with other CYP2D6 substrates is not expected to require any dose adjustment for those compounds. **Antacids:** May be taken without regard to antacid use. **Pregnancy and lactation:** Do not use during pregnancy or breast-feeding. Effect on fertility unknown. **Side-Effects:** **Clinical Studies and post-marketing experience:** **Common (1-10%):** Gout flares, headache, diarrhoea*, nausea, liver function test abnormalities**, rash, oedema. **Uncommon (0.1-1%):** Blood thyroid stimulating hormone increased, diabetes mellitus, hyperlipidemia, decrease appetite, weight increase, decreased libido, insomnia, dizziness, paraesthesia, hemiparesis, somnolence, altered taste, hypoaesthesia, hyposmia, atrial fibrillation, palpitations, ECG abnormal, hypertension, flushing, hot flush, dyspnoea, bronchitis, upper respiratory tract infection, cough, abdominal pain, abdominal distension, gastro-oesophageal reflux disease, vomiting, dry mouth, dyspepsia, constipation, frequent stools, flatulence, gastrointestinal discomfort, cholelithiasis, dermatitis, urticaria, pruritus, skin discolouration, skin lesion, petechiae, rash macular, rash maculopapular, rash papular, arthralgia, arthritis, myalgia, musculoskeletal pain, muscle weakness, muscle spasm, muscle tightness, bursitis, renal failure, nephrolithiasis, haematuria, pollakiuria, proteinuria, erectile dysfunction, fatigue, chest pain, chest discomfort, blood amylase increase, platelet count decrease, WBC decrease, lymphocyte count decrease, blood creatine increase, blood creatinine increase, haemoglobin decrease, blood urea increase, blood triglycerides increase, blood cholesterol increase, haematocrit decrease, blood lactate dehydrogenase increased, blood potassium increase. **Rare (0.1-0.01%):** Pancytopenia, thrombocytopenia, anaphylactic reaction**, drug hypersensitivity**, blurred vision, weight decrease, increase appetite, anorexia, nervousness, linnitus, pancreatitis, mouth ulceration, hepatitis, jaundice**, liver injury**, Toxic epidermal necrolysis**, Stevens-Johnson Syndrome**, DRESS**, angioedema**, generalized rash (serious)**, erythema, exfoliative rash, rash follicular, rash vesicular, rash pustular, rash pruritic**, rash erythematous, rash morbilliform, alopecia, hyperhidrosis, rhabdomyolysis**, joint stiffness, musculoskeletal stiffness, tubulointerstitial nephritis**, micturition urgency, thirst, blood glucose increase, activated partial thromboplastin time prolonged, red blood cell count decrease, blood alkaline phosphatase increase. *Treatment-emergent non-infective diarrhoea and abnormal liver function tests in combined Phase III studies more frequent in patients concomitantly treated with colchicine. **Adverse reactions coming from post-marketing experience. Rare serious hypersensitivity reactions including Stevens-Johnson Syndrome and anaphylactic reaction/shock have occurred in post-marketing experience. Hypersensitivity reactions to febuxostat can be associated with the following symptoms: skin reactions characterised by infiltrated maculopapular eruption, generalised or exfoliative rashes, also skin lesions, facial oedema, fever, haematologic abnormalities such as thrombocytopenia, and single or multiple organ involvement (liver and kidney including tubulointerstitial nephritis). Gout flares commonly observed soon after treatment start and in first months. Frequency decreases after time. Gout flare prophylaxis is recommended. Please consult the SmPC for further information. **Pack sizes:** 80 mg and 120 mg tablets: 28 film-coated tablets. **Legal category:** POM. **Marketing authorization number:** EUJ1/08/447/001 & 003. **Marketing authorization holder:** Menarini International Operations Luxembourg S.A., Avenue de la Gare, L-1611 Luxembourg, Luxembourg. **Marketed by:** A. Menarini Pharmaceuticals Ireland Ltd. Further information is available on request to A. Menarini Pharmaceuticals Ireland Ltd, 2nd Floor, Castlecourt, Monkstown Farm, Monkstown, Glenageary, Co. Dublin or may be found in the SmPC. **Last updated:** March 2014. **Reference:** 1. Adenuric SmPC, March 2014.

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MTX = Methotrexate
DMARD = Disease-modifying anti-rheumatic drug

References:

1. INFLECTRA™. European Public Assessment Report (EPAR). Available at: www.ema.europa.eu/ema/index.jsp?curl=pages/medicines/human/medicines/002778/human_med_001677.jsp&mid=WC0b01ac058001d124. [Accessed January 2014]. 2. EMA. Guideline on similar biological medicinal products containing monoclonal antibodies – non-clinical and clinical issues. May 2012. Available at: http://www.ema.europa.eu/docs/en_GB/document_library/Scientific_guideline/2012/06/WC500128686.pdf [Accessed January 2014].

IE/INF/14/0002
January 2014



IRHPS Autumn 2015 Update

Welcome to the Annual Scientific Meeting of the Irish Society for Rheumatology and the Irish Rheumatology Health Professionals Society.

A very warm welcome to our keynote speakers this year, Colin Dunleavy (Senior Physiotherapist), Mary Ryan (Clinical Nurse Specialist) and Natalie Wallace (Senior Dietician) all from the Weight Management Service in St. Columcille's Hospital, Loughlinstown, Co. Dublin.

Well done to all those who submitted abstracts demonstrating the high quality and varied research that is currently taking place in rheumatology centres and universities throughout Ireland. Please take the opportunity to look at the large number of posters we received this year and remember to vote for the "People's Choice" poster.

I would like to extend my gratitude to the ISR, Michael Dineen & Jenny Howard. Without their support our annual meeting would not be possible.

Thanks again to the Pharma companies for their continued support, without which valuable educational opportunities would be lost. Thanks must go to Abbvie, MSD, Roche, UCB and Pfizer. New this year is the IRHPS Educational Bursary kindly sponsored by Janssen. Full details on this and all our bursaries are available on our website www.irhps.ie.

The IRHPS committee's support and dedication over the past year has been invaluable. My sincere thanks to you all.

I do hope you enjoy this year's conference and that you will find the discussions educational and beneficial to your everyday practice.

Best wishes,
DEREK DEELY
IRHPS Chairperson.

“WORKING ON A CURE”

ARTHRITIS IRELAND ARE DELIGHTED TO ANNOUNCE DR URSULA FEARON AS OUR SECOND CHAIR OF RHEUMATOLOGY

You are cordially invited to the inaugural lecture of

Dr Ursula Fearon, Arthritis Ireland's Chair of Molecular Rheumatology

Discussion

Advances in finding new treatments for arthritis



WHERE: Stanley Quek Hall, Trinity Biomedical Sciences Institute, Pearse Street, Dublin 2

WHEN: Thursday, 8th October 7.30pm (AGM 6.30pm)

REGISTER: Admission is Free. Essential to Register online at arthritisireland.ie or call 1890 252 846

“When I was diagnosed with arthritis the outlook was bleak but Arthritis Ireland supporting research today gives me hope for a brighter, pain-free future.”

June Hendrick



Oral Presentations – Autumn Meeting

Thursday September 24th 2015

| Abstract No | Author(s) | Abstract Title | Day | Time |
|---|-------------------------|---|-------|-------|
| Plenary Session 1: Scientific Research | | | | |
| 15A149 | Dr Lorna Gallagher | Pseudostarvation using the AMPK Activator Metformin downregulates Inflammation in Rheumatoid Arthritis Synovial Tissue | Thurs | 10.30 |
| 15A138 | Dr Michelle Trenkmann | Role of the Epigenetic Regulator EZH2 in Proinflammatory Macrophage Polarisation and Signalling in Rheumatoid Arthritis | Thurs | 10.45 |
| 15A168 | Dr Fahd Adeeb M. Ashraf | Behcet's disease in Ireland: Patient Access and Response to Biologics | Thurs | 11.00 |
| 15A154 | Dr Carl Orr | The Relationship Between Anti-CCP Autoantibodies and ANA Status in RA | Thurs | 11.15 |
| Plenary Session 2: Clinical Research | | | | |
| 15A119 | Dr Charlene Foley | Down's Arthropathy (DA): Clinical and Radiological Features of Arthritis in Children with Trisomy 21 (T21) | Thurs | 13.30 |
| 15A172 | Dr Cathy Donaghy | Rheumatoid Arthritis – Now & Then | Thurs | 13.45 |
| 15A169 | Dr Richard Conway | Ustekinumab for the Treatment of Refractory Giant Cell Arteritis | Thurs | 14.00 |
| 15A130 | Dr John Stack | Drug Survival in Patients with Inflammatory Arthritis Treated with Reduced Dose Anti-TNF- α : Results of a 4 Year Observational, Prospective Study | Thurs | 14.15 |
| Young Investigator Award 2015 lecture | | | | |
| 15A166 | Dr Cara McDonagh | Ultrasound Assessment of the Median Nerve in Carpal Tunnel Syndrome Before and After Corticosteroid Injection | Thurs | 16.45 |

Friday September 25th 2015

| | | | | |
|---|----------------------------|---|--------|-------|
| Plenary Session 3: Clinical Case Presentations | | | | |
| 15A125 | Dr Shakeel Anjum | | Friday | 9.00 |
| 15A134 | Dr Q Shah | | Friday | 9.15 |
| 15A142 | Dr Roger Stewart | | Friday | 9.30 |
| 15A167 | Dr Orla Ni Mhuircheartaigh | | Friday | 10.00 |
| Bernard Connor Medal 2015 | | | | |
| Award Winner: Eva McCabe | | Targeted medical education debunks the myths of back pain from NUI Galway | | |



ABSTRACT 1 (15A149)

ORAL PRESENTATION

Pseudostarvation using the AMPK Activator Metformin downregulates Inflammation in Rheumatoid Arthritis Synovial Tissue

Author(s): Lorna Gallagher, Ursula Fearon, Douglas J. Veale, David Kane, Luke A. O'Neill and Ronan Mullan

Department(s)/Institution(s): Clinical Medicine, Trinity Biosciences Science Institute, Trinity College Dublin

Introduction: AMP-activated protein kinase (AMPK) is a highly conserved, regulator of cellular energy status. In inflammation, AMPK inactivation is associated with increased glucose consumption through aerobic glycolysis, and up-regulation of pro-inflammatory effector responses. Pseudostarvation of cells through AMPK activation by hypoglycaemic therapy, i.e. Metformin, reverses these effects.

Aims/Background: Our aim is to demonstrate AMPK activation in RA synovial tissues (RAST), and investigate the pro-inflammatory responses in stimulated primary RA synovial fibroblast cells (RASFCs) following pharmacological AMPK activation by Metformin in vitro.

Method: AMPK, activated and inactivated, and ACC, activated and inactivated (P-AMPK, AMPK, P-ACC & ACC, respectively) expression in RAST and RASFCs were analyzed by immunoblotting. RASFCs were stimulated with LPS/TNF α (10ng/ml) in the presence of Metformin (0–62.5 μ M) and assessed for wound healing and invasion capabilities. Supernatants were evaluated for IL-6 and IL-8 production by ELISA. RAST, obtained from RA patients during arthroscopy, were stained by immunohistochemistry for P-AMPK, AMPK, P-ACC and ACC.

Results: P-AMPK is present in RAST and in cultured RASFCs. P-AMPK expression was upregulated in the presence of Metformin (10 μ M and 50 μ M). Stimulated cells with LPS or TNF α (10ng/ml), in the presence of Metformin (10 μ M and 50 μ M) increased P-AMPK expression, greater than that which was observed following LPS/TNF α stimulation alone. Additionally, LPS stimulated cells in the presence of Metformin (10 μ M and 50 μ M) showed P-ACC expression, which was not observed in LPS stimulated cells alone. Immunohistochemistry staining of RAST showed P-AMPK and P-ACC staining, indicating that AMPK is activated and is activating ACC downstream. Stimulation of RASFCs with LPS or TNF α (10ng/ml) in the presence of Metformin (15–62.5 μ M) decreased IL-6 and IL-8 production in a dose dependent manner. RASFCs stimulated with LPS/TNF α (10ng/ml) in the presence of Metformin (15–62.5 μ M) showed a dose dependent decrease in the ability of the cells to heal an induced wound or invade through matrigel.

Conclusions: RAST and RASFCs are capable of responding to pharmacological alterations in cellular metabolic pathways. Metformin both activates AMPK and downregulates pro-inflammatory effects in RA. AMPK activation occurs in concert with P-ACC. AMPK activation therapy pathways may therefore be a suitable future strategy in the treatment of Rheumatoid Arthritis.

ABSTRACT 2 (15A138)

ORAL PRESENTATION

Role of the Epigenetic Regulator EZH2 in Proinflammatory Macrophage Polarisation and Signalling in Rheumatoid Arthritis

Author(s): Michelle Trenkmann, Eimear Linehan, Mary Canavan, Douglas Veale, Ursula Fearon

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre University College Dublin, Ireland

Introduction: Macrophages (M ϕ) polarise along a spectrum of proinflammatory (M1) to regulatory/wound-healing (M2) phenotypes and are key pathogenic cells in rheumatoid arthritis (RA). Epigenetic mechanisms determine cell fate and have been found aberrantly regulated in RA.

Aims/Background: To examine a role of the histone methyltransferase Enhancer of Zeste Homolog 2 (EZH2) in RA macrophage polarisation and activation.

Method: Monocyte-derived M ϕ were differentiated from peripheral blood monocytes using M-CSF, transfected with EZH2 siRNA, stimulated with LPS+IFN γ (M1) or IL-4 (M2), and analysed by multicolour flow cytometry, quantitative real-time PCR and Western blot.

Results: Polarisation was confirmed by induction of CD40, CD64 and CD80 (M1) or CD206 (M2) (RA n=8, HC n=9). CD64 expression was higher in RA than HC M ϕ (64 \pm 16% vs. 35 \pm 23% CD64+ cells; p<0.01) indicating skewing towards a proinflammatory M1 phenotype in RA. EZH2 was upregulated in M1-polarised M (HC: 9.25 \pm 3.1-fold, RA: 13.22 \pm 7.13-fold; p<0.01). Silencing of EZH2 inhibited M1 polarisation (i.e. less CD80+, CD64+ and CD40+ cells), whereas unpolarised M0 M ϕ showed increased expression of CD40 and CD80 (p<0.05 all)(n=5). EZH2 silencing increased STAT1 mRNA and protein expression in M0 and M1 M ϕ (p<0.05) without affecting STAT1 phosphorylation. In contrast, we demonstrated increased phospho-STAT3 in EZH2-silenced M1 M ϕ with levels of total STAT3 remaining unchanged.

Conclusions: RA M ϕ show an intrinsic shift towards a proinflammatory M1-like phenotype and M1-polarised M ϕ induce EZH2. EZH2 silencing skewed M0 M ϕ towards a more inflammatory/activated phenotype but attenuated the inflammatory phenotype of M1 M ϕ , possibly mediated through differential regulation of JAK/STAT signalling.

ABSTRACT 3 (15A168)

ORAL PRESENTATION

Behcet's disease in Ireland: Patient Access and Response to Biologics

Author(s): Fahd Adeeb^{1,3}, Wan Lin¹, Austin Stack², Joe Devlin¹, Alexander Duncan Fraser^{1,3}

Department(s)/Institution(s): ¹Rheumatology Department, University Hospital Limerick, Limerick, Ireland
²Renal Department, University Hospital Limerick, Limerick,



Ireland
³Graduate Entry Medical School, University of Limerick

Introduction: Current literature shows promising data of efficacy of anti TNF- α biologics for Behcet's disease (BD) patients.

Aims/Background: The aim of the study was to investigate a cohort of BD patients in Ireland, the current prescription practice for anti tumour necrosis factor alpha (anti TNF- α) biologics, patient response, and the risk of serious infections associated with it.

Method: All BD patients attending our rheumatology department and satisfied the ISGBD or ICBG criteria were included in the study. Response was evaluated depending on patient's new clinical features, and improvement or resolution of clinical symptoms. Management was compared with the current European League Against Rheumatism (EULAR) guidelines published in 2009.

Results: Out of a cohort of 22 patients, 18 (81.9%) received anti-TNF- α biologic therapies (6 males, 12 females), with mean age of 38.9. 14 patients (77.8%) achieved complete remission and 4 patients (22.2%) achieved low disease activity while on anti-TNF- α biologics. Among this, 3 patients (16.7%) were successfully switched to a different agent due to secondary failure, while 7 patients (38.8%) needed at least trial of 3 different anti-TNF- α biological therapies before controlling their disease at least to a low disease activity. 5 allergic reactions were encountered, all with the administration of infliximab infusions. 5 serious infections were documented involving 3 patients (16.7%) requiring intravenous antimicrobials and hospitalization, all in patients aged 50 years or above.

Conclusions: Response rates to anti-TNF- α therapy were excellent and treatment was well tolerated, but should be used with caution in patients aged above 50. BD patients who fail one anti TNF- α due to intolerance, ineffectiveness or secondary failure may still benefit from switching to another drug from this group.

References:

- Hatemi G, Silman A, Bang D, Bodaghi B, Chamberlain AM, Gul A, Houman MH, Kötter I, Olivieri I, Salvarani C, Sfikakis PP, Siva A, Stanford MR, Stübiger N, Yurdakul S, Yazici H (2009 Oct) Management of Behçet disease: a systematic literature review for the European League Against Rheumatism evidence-based recommendations for the management of Behçet disease. *Ann Rheum Dis* 68(10): 1528–1534
- Arida A, Fragiadaki K, Giavri E, Sfikakis PP (2011 Aug) Anti-TNF agents for Behçet's disease: analysis of published data on 369 patients. *Semin Arthritis Rheum* 41(1):61–70
- P.P. Sfikakis, N. Marcomichelakis, E. Alpsoy, et al. Anti-TNF therapy in the management of Behçet's disease-review and basis for recommendations. *Rheumatology (Oxford)*, 46 (2007), pp. 736–741

ABSTRACT 4 (15A154)

ORAL PRESENTATION

The Relationship between Anti-CCP Autoantibodies and ANA Status in RA

Author(s): Orr C, Young F, Veale DJ.

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland

Introduction: Anti-CCP auto-antibodies play a significant aetiological role in the pathogenesis of RA.1 ANA has been reported positive in 45% of RA patients,2,3 and there is a higher frequency of being ANA positive in those positive for RF.4 Furthermore, patients who are positive for RF and ANA have been shown to have a worse prognosis with respect to the development of erosive disease and pain.4 There have been no previous reports of how ANA in RA patients may relate to anti-CCP status.

Aims/Background: In an RA cohort, we examined the relationship of anti-CCP, ANA and RF autoantibodies.

Method: A cohort of consecutive RA patients were characterised for anti-CCP, RF, ANA. Those with symptoms potentially indicative of a connective tissue disease were excluded. The RF and anti-CCP status were recorded, as was the ANA dilution (if positive) and the ANA staining pattern. A positive ANA was determined as $\geq 1:100$. Fisher's Exact Test (2-tailed) was used to test for an association between both RF and anti-CCP, and ANA status.

Results: ANA was positive in 86/171 (50.3%) of our cohort. In those positive for ANA the mean dilution was 1:744, mode 1:200.

An association was observed for those positive for anti-CCP and those positive for ANA ($p=0.0125$), see fig.1. No association was observed for RF and ANA status ($p=0.6471$), or for concordant positive for RF and anti-CCP, and ANA ($p=0.1044$).

Figure 1.

| | ANA+ | ANA- | Total |
|-----------------------------|------------|------------|-------|
| All | 86 (50.3%) | 85 (49.7%) | 171 |
| Staining Pattern: | | | |
| Homogenous | 35 (40.7%) | | |
| Speckled | 31 (36.0%) | | |
| Mixed | 9 (10.5%) | | |
| Other | 11 (12.8%) | | |
| ^a Anti-CCP + | 50 | 32 | 82 |
| Column % | 66.7% | 45.7% | |
| Row % | 61.0% | 39.0% | |
| ^a Anti-CCP – | 25 | 38 | 63 |
| Column % | 33.3% | 54.3% | |
| Row % | 39.7% | 60.3% | |
| Total | 75 | 70 | 145 |
| RF+ | 47 | 43 | 90 |
| Column % | 54.7% | 50.6% | |
| Row % | 52.2% | 47.8% | |
| RF- | 39 | 42 | 81 |
| Column % | 45.3% | 49.4% | |
| Row % | 48.1% | 51.9% | |
| Total | 86 | 85 | 171 |
| ^{a,b} Concordant + | 43 | 27 | 70 |
| Column % | 63.2% | 48.2% | |
| Row % | 61.4% | 38.6% | |
| ^{a,b} Concordant – | 25 | 29 | 54 |
| Column % | 36.8% | 51.8% | |
| Row % | 46.3% | 53.7% | |
| Total | 68 | 56 | 124 |

a. Anti-CCP status unknown in 26

b. Concordant positive/negative for both RF and anti-CCP



Conclusions: To our knowledge, this is the first study in RA patients to report a significant association between anti-CCP and ANA status. Given that we found no association between RF and ANA as previously reported, it is especially important to define the characteristics of the anti-CCP/ANA concordant positive patients with respect to bone erosions and response to treatment.

References:

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ABSTRACT 5 (15A119) ORAL PRESENTATION

Down's Arthropathy (DA): Clinical and Radiological Features of Arthritis in Children with Trisomy 21 (T21)

Author(s): C Foley, EJ MacDermott, D Veale, OG Killeen

Department(s)/Institution(s): NCPR OLCCHC; SVUH

Introduction: The 'Arthropathy of Down syndrome' was first described in 1984, yet we still have limited literature on the features of this arthritis, although it is estimated to be 3-6 times more common than JIA in the general paediatric population.

Aims/Background: To describe the clinical course and radiological features of DA.

Method: Musculoskeletal examination performed on children with T21 (0-20 years). DA cases identified, investigated and managed as per normal clinical practice. New cases of JIA diagnosed, recruited to a comparison group.

Results: 503 children with T21 screened for arthritis (56.4% Male, age 0.6-19.2 years); 22 new cases of DA detected (33 = total DA cases now attending the NCPR).

DA Features

- 82% = Polyarticular RF negative arthritis,
- 78.6% = Small joint involvement,
- 66.7% = X-Ray changes at diagnosis, (29.2% erosions),
- 1.7 years = Time to diagnosis
- 75% = Methotrexate (MTX)- associated nausea.

Conclusions: Small joint involvement of the hands is a predominant disease pattern, and unique to DA. Treatment with MTX was complicated by significant MTX-associated nausea. Outcomes could be improved for children with DA by inclusion of a musculoskeletal examination in the annual T21 surveillance programme.

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ABSTRACT 6 (15A172) ORAL PRESENTATION

Rheumatoid Arthritis – Now & Then

Author(s): Dr C Donaghy, Dr K Patterson, Dr A Pendleton

Department(s)/Institution(s): Musgrave Park Hospital, Belfast HSCT

Introduction: There have been significant changes in the investigation and treatment of rheumatoid arthritis over the past number of decades. Disease is now detected earlier, and there is a wider range of DMARD and biological drug treatments available.

Aims/Background: We compared two cohorts of patients with RA to examine characteristics including demographics, extra-articular manifestations, drug treatments used, and joint injections and replacements.

Method: We reviewed charts of patients with RA who had been inpatients through the 1970's-1990's, diagnosed prior to 1990 (Group 1), and compared with patients diagnosed post 2000, who were coded as seropositive RA (Group 2). We examined 50 charts for each group.

Results: Demographics were similar, with 78% and 82% female, and peak age at diagnosis being between 46 - 60. There were a higher proportion of patients diagnosed with late onset RA in Group 2. Group 1 included patients with multiple admissions. The most common reason for admission was flare of disease. Group 2 did not include any inpatient admissions. There is a substantial reduction in extra-articular manifestations, with radiographic erosions of 70% and 18%, cardiac involvement of 50% and 2%, anaemia of 50% and 18%, cutaneous nodules of 36% and 2%, lung disease of 24% and 2%, osteoporosis of 24% and 12%, vasculitis of 10% and 0%, and eye disease of 8% and 0% respectively. Use of DMARDs included distamine in 62% and 0%, sulfasalazine in 50% and 50%, gold in 44% and 2%, long term steroids in 40% and 18%, methotrexate in 14% and 92%, hydroxychloroquine in 14% and 50%, and leflunomide in 0% and 36% respectively. Group 2 also included several patients on biologic agents. A much higher side effect profile was noted with the broader range and higher doses of DMARDs. Group 2 demonstrated a lower number of joint injections being carried out overall but a higher proportion of small joints being injected. Joint replacements are also much reduced, with hip and knee remaining the most commonly implicated joints.

Conclusions: The study has shown that as treatments for RA have evolved, there is a much lower rate of inpatient hospital admissions, extra-articular manifestations and surgical treatments.



ABSTRACT 7 (15A169)

ORAL PRESENTATION

Ustekinumab for the Treatment of Refractory Giant Cell Arteritis

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Background: Giant cell arteritis (GCA) requires treatment with high dose corticosteroids. Many patients require chronic steroid therapy with associated significant side effects. There is a lack of proven alternative therapies. Interleukin 12 (IL12) and interleukin 23 (IL23) drive Th1 and Th17 responses respectively which are central to the pathogenesis of GCA. Our aim was to evaluate the efficacy and safety of ustekinumab, an IL12/IL23 inhibitor in GCA.

Methods: We performed a prospective open label study of ustekinumab in patients with refractory GCA. All patients met the 1990 ACR classification criteria for GCA. Patients underwent standardized clinical assessments. Disease activity was based on a combination of clinical assessment, acute phase reactants (ESR, CRP) and available imaging studies. Descriptive statistics were reported as median and interquartile range (IQR) or number (n) and percentages as appropriate, Wilcoxon Signed Rank test was used to compare between group differences. Statistical significance was set at $p < 0.05$.

Results: 12 patients commenced ustekinumab having failed to taper corticosteroid monotherapy and a median of 1 other immunosuppressant, with a median (IQR) of 3 (2, 5) prior relapses of GCA. 83% had experienced significant corticosteroid side effects. Full demographic and clinical details are shown in Table 1. Median (IQR) duration of ustekinumab at last follow-up was 8 (5, 11) months. Patients with clinician assessed active GCA decreased from 12 to 1. Median BVAS (IQR) decreased from 1 (0, 2) to 0 (0, 0) ($p=0.018$). Median (IQR) steroid dose decreased from 23mg (15, 33) to 5mg (3, 8) ($p=0.003$). 8 patients were able to stop other immunosuppressants and 3 were able to stop corticosteroids. There was no significant change in ESR or CRP and no patient experienced a relapse of GCA during ustekinumab treatment. 5 adverse events were recorded, 1 UTI, 1 LRTI, 1 hair loss, 1 paraesthesia, and 1 dental abscess. 3 patients discontinued ustekinumab due to adverse events or personal preference, 2 subsequently had a relapse of GCA.

Conclusion: Ustekinumab permitted a significant reduction in steroid dose and other immunosuppressants in patients with refractory GCA. The efficacy of ustekinumab in GCA warrants further investigation in a randomized controlled trial.

Table 1: Baseline demographic and clinical details of included patients

| | |
|---|-------------|
| Age, years, median (IQR) | 68 (61, 73) |
| Female, n (%) | 10 (83) |
| ACR criteria, n (%) | 12 (100) |
| Biopsy positive, n (%) | 7 (58) |
| Temporal artery ultrasound positive, n (%) | 2 (17) |
| CT Angiogram positive, n (%) | 3 (25) |
| Cranial-ischaemic complications, n (%) | 2 (17%) |
| Vasculitis Damage Index, median (IQR) | 2 (0, 2) |
| Disease duration, months, median (IQR) | 30 (15, 39) |
| Failed steroid monotherapy, n (%) | 12 (100) |
| Failed immunosuppressant, n (%) | 11 (92) |
| Immunosuppressants failed, median (range) | 1 (0, 3) |
| Failed methotrexate, n (%) | 10 (83) |
| Duration methotrexate, months, median (IQR) | 10 (5, 36) |
| Dose methotrexate, mg/week, median (IQR) | 20 (15, 21) |
| Relapses, median (IQR) | 3 (2, 5) |
| Clinical features at last relapse | |
| Cranial, n (%) | 7 (58) |
| PMR, n (%) | 5 (42) |
| Constitutional, n (%) | 6 (50) |
| Large vessel vasculitis, n (%) | 4 (33) |
| Corticosteroid adverse events, n (%) | 10 (83) |
| BVAS, median (IQR) | 1 (0, 2) |
| Prednisolone dose, mg, median (IQR) | 23 (15,33) |
| ESR, mm/hr, median (IQR) | 12 (2, 20) |
| CRP, mg/L, median (IQR) | 5 (2, 25) |

ABSTRACT 8 (15A130)

ORAL PRESENTATION

Drug Survival in Patients with Inflammatory Arthritis Treated with Reduced Dose Anti-TNF- α : Results of a 4 Year Observational, Prospective Study

Author(s): John Stack, Claire Louise Murphy, Linzi Martin, Clara Bannon, Trevor Duffy, Eithne Murphy, Maurice Barry

Department(s)/Institution(s): Rheumatology Department, Connolly Hospital Blanchardstown

Introduction: Anti-TNF- α drugs are effective treatments for patients with inflammatory arthritis (IA). They are however expensive and their use carries a significant cost burden to the tax payer and society. Anti-TNF- α dose reduction in patients with IA who are in remission may lead to significant cost savings.

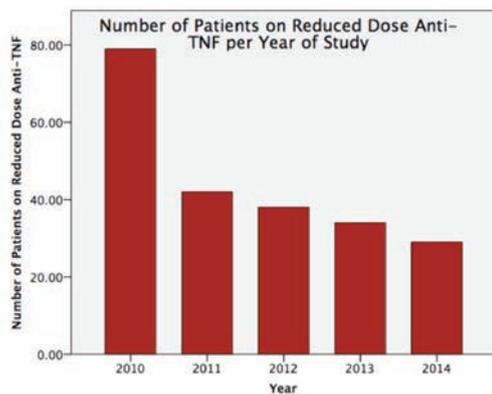
Aims/Background: The aim of this prospective, non-blinded, non-randomised, observational study was to observe whether patients with IA (rheumatoid arthritis (RA), ankylosing spondylitis (AS) and psoriatic arthritis (PsA)) could successfully dose reduce anti-TNF- α over a 4 year period and to estimate the cost savings associated with dose reduction.

Method: Anti-TNF- α dose reduction was offered to patients with IA who were in remission as defined by standardized disease activity indices (DAS-28 < 2.6 , BASDAI < 4). Patients on etanercept were reduced from 50mg weekly to 50mg fortnightly. Patients on adalimumab were reduced from 40mg fortnightly to 40mg monthly. Patients who agreed to dose



reduction were invited to participate in the study which commenced in 2010. Patients were assessed for disease activity at 3, 6, 12, 24, 36 and 48 months. Patients who remained in remission were encouraged to stay on the reduced dose anti-TNF- α . The primary end-point was the number of patients remaining on reduced dose anti-TNF- α at 2 years. The study was then extended out to 4 years. Cost savings were estimated by deducting the actual total cost of anti-TNF- α used from the theoretical cost of using full dose anti-TNF- α had dose reduction not occurred.

Results: 79 patients with IA in remission were recruited. 57% had RA (n=45), 13% PsA (n= 10) and 30% AS (n= 24). 57% (n=45) were on etanercept and 43% (n=34) were on adalimumab. The percentage of patients who remained on reduced dose anti-TNF- α at 4 years was 36% (n=29). Of the patients who successfully dose reduced at year 1 (n=42), a majority (69%, n=29) were able to maintain the dose reduction up to year 4. A greater percentage of AS patients (52% n=12) were able to maintain dose reduction up to year 4 but this was not significant. Net savings to the exchequer of €1,211,697 were estimated. The average cost saving per patient included in the study per year was €3834.



Conclusions: Dose reduction of anti-TNF- α therapy in patients with IA in remission is feasible and can yield significant cost savings. Further studies could be designed to help define which patients are more likely to successfully dose reduce.

YOUNG INVESTIGATOR AWARD 2015

ABSTRACT 9 (15A166) ORAL PRESENTATION

Ultrasound Assessment of The Median Nerve in Carpal Tunnel Syndrome Before and After Corticosteroid Injection

Author(s): C. McDonagh^{1,2,*}, M. Alexander³, D. Kane¹

Department(s)/Institution(s): 1 Department of Rheumatology, Tallaght Hospital, Dublin, 2 Spinal Cord Injury, National Rehabilitation Hospital, Dun Laoghaire, 3 Department of Neurophysiology, Tallaght Hospital, Dublin, Ireland

Introduction: Carpal tunnel syndrome (CTS) is the commonest entrapment neuropathy.(1, 2) Ultrasound (US) has been used to assess the median nerve (MN) in carpal tunnel since 1992 by assessing the cross-sectional area (CSA) primarily.(3) However, there is very limited published research looking at the changes in the MN after treatment with corticosteroid injection. (4, 5) Elastography assessment of the MN after injection has not been documented.

Aims/Background: 1. To assess the MN and carpal tunnel before and after corticosteroid injection by means of US, NCS and clinical assessment. 2. To establish if US findings can be used to predict whether a patient will respond to injection. 3. To establish what the clinical outcome is at 6 months to corticosteroid injection in CTS.

Method: Patient with symptoms and signs of idiopathic CTS based on clinical assessment were recruited from outpatients'. Patients were assessed with US (including elastography and power doppler), NCS and the Levine- Katz CTS questionnaire (LKQ) and visual analogue score (VAS) for pain at baseline, 6 weeks and 6 months. LKQ was the primary outcome measure. Healthy volunteers were also recruited to act as a control group.

Results: A total of 29 patients (40 wrists) and 12 controls (23 wrists) were included in the study. The LKQ scores improved significantly between baseline and 6 weeks (p= <0.001) but this significant improvement was not maintained at 6 months. VAS improved significantly between baseline and 6 weeks. There was a statistically significant reduction in CSA of the MN at 6 weeks and 6 months (p= 0.002 and 0.038 respectively). Vascularity and MN stiffness as assessed by elastography did not change significantly during the study period. All six NCS parameters assessed improved significantly. CSA of the MN could not predict response to injection as there was no significant difference in CSA of the MN in responders versus non responders.

Conclusions: Corticosteroid injection leads to significant improvement in median nerve CSA as assessed by US and function as assessed by NCS up to 6 months. However patients' subjective assessment of improvement in symptoms and function did not match the objective measures at 6 months. US cannot be used to predict response to treatment based on this study.

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ABSTRACT 10 (15A100) POSTER PRESENTATION

Systemic Sclerosis Inpatient Mortality has not improved from 1995-2011. Results from a National Irish audit of Scleroderma Co-morbidities

Author(s): L. Harty, D. Fitzgerald, M. Henry, J. Ryan, S. Harney



Department(s)/Institution(s): Rheumatology and Respiratory Departments, Cork University Hospital

Introduction: Despite the advent of potent therapies it is not clear that longevity of patients with systemic sclerosis (SSc) has improved.

Aims/Background: To evaluate age of death of SSc inpts, LOS and comorbidities in SSc patients.

Method: The HIPE system was evaluated from 57 hospitals from 1995-2011 for SSc inpts. Results are shown as totals and mean (SD). Mann-whitney u and logistic regression were employed.

Results: 2667 inpt admissions occurred; 4:1, F:M, mean age 59yrs (15). Average 157 (15) admissions occurred annually for SSc patients ($r^2=0.01, p=0.7$). 146 inpts died at average 65yrs (5) without annual improvement ($r^2=0.03, p=0.5$). SSc age of death was younger than general inpts ($p<0.0001$), whose longevity improved from 72 to 74yrs ($r^2=0.9, p<0.0001$). Male SSc inpts were average 6yrs younger than female at death (60yrs (10) v 66 yrs (6); $p<0.01$) in contrast to general inpts when men were average 3yrs younger than women at death (70 yrs v 73 yrs). SSc LOS increased to 14 days ($r^2=0.3, p=0.03$), as did age of admission ($r^2=0.4, p<0.01$). Autoimmunity was the commonest admitting diagnosis ($n=945$). Lung disease accounted for 383 admissions (170 infection, 62 PAH), CVS disease $n=397$ (236 limb / cardiac / cerebral ischaemic events, 51 CCF, 32 arrhythmia), GI $n=301$, Rehab $n=151$, MSK $n=120$, Haematological $n=89$, Renal $n=85$. 16 pregnancies occurred with 2 miscarriages, 3 pre-eclampsia, and 9 unspecified complications. Imaging was the commonest procedure ($n=346$), followed by IV therapy ($n=297$), rehabilitation ($n=277$), OGD ($n=208$) with 62 limb amputations and 9 kidney transplants.

Conclusions: Age of death among SSc inpts is not improving, worse in men. SSc LOS is increasing. Cardiopulmonary comorbidity predominates among Irish SSc inpts requiring more awareness and therapeutics for this aspect of SSc.

ABSTRACT 11 (15A102) POSTER PRESENTATION

Otolaryngeal Manifestations of Behçet's Disease in a Northern European population

Author(s): F. Adeb^{1,3}, C.W.R. Fitzgerald¹, C.V. Timon², N.P. Shine¹, J.P. Hughes³, A.D. Fraser^{1,3}

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²Royal Victoria Eye and Ear Hospital, Dublin, Ireland

³University of Limerick, Graduate Entry Medical School, Limerick, Ireland

Introduction: Behçet's Disease (BD) is a complex, inflammatory, systemic disease of unknown etiology, typically affecting the triad of oral and genital mucosa and the eye. The Otolaryngology-related manifestations of BD, though previously described, are said to be relatively rare and have been less thoroughly explored in the literature.

Aims/Background: The aim of this study was to undertake an otolaryngeal assessment of a cohort of BD patients in University Hospital Limerick, Ireland.

Method: Behçet's patients fulfilling the International Study Group for Behçet's Disease (ISGBD) or the International Criteria for Behçet's Disease (ICBD) criteria for diagnosis were included in the study and underwent assessment with an otolaryngologist, which include flexible laryngoscopy. Intra-oral, pharyngeal and laryngeal manifestations of BD were documented and characterised. Patients also underwent hearing assessment with pure-tone audiometry.

Results: Fifteen BD patients were identified (4 male, 11 female; median age 36 years). 60% ($n=9$) showed evidence of disease on examination and flexible laryngoscopy. 33% ($n=5$) including two asymptomatic patients showed structural laryngeal changes related to BD. 13% ($n=2$) demonstrated bilateral, symmetrical sensorineural hearing loss. One patient warranted consideration for tracheotomy.

Conclusions: Our cohort demonstrate significant structural laryngeal changes, which appear to be more common than was previously thought. Raised awareness of the risk of laryngeal pathology in BD patients, including potential risk for later airway compromise, even in the absence of overt clinical symptomatology, and early screening may result in earlier diagnosis and treatment. Rheumatologists and Otolaryngologists should consider closer multi-disciplinary co-operation in the management and follow up of patients with BD.

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ABSTRACT 12 (15A103) POSTER PRESENTATION

Management and Follow up of Patients on Biologic Treatment for Rheumatological Disease Who Have Been Admitted to Hospital Acutely

Author(s): Kerry Aston, Philip Gardiner, Rosemary Friel

Department(s)/Institution(s): Rheumatology Altnagelvin Hospital

Introduction: Audit of the Management and Follow up of Patients on Biologic Treatment for Rheumatological Disease Who Have Been Admitted to Hospital Acutely.

Aims/Background: 1-Was biologic medication clearly documented in patient notes 2-Reason for admission 3-Was advice given by rheumatology team regarding possible suspension of medication



Method: Search using H&C numbers – 39 patients had been admitted acutely between Jan and Jun 2014.

Results: One death occurred from severe community acquired pneumonia. 12 patients were documented as having acute infections, one was admitted after an RTA (compound fracture). Treatment with biologics was suspended in all cases with infection. The rheumatology team were informed about all of the admissions.

Six other acute admissions for variety of reasons: 2 with MI (biologics continued), 1 with AF (Rituximab), 1 with raised LFTs (biologic suspended). One patient on Abatacept had been admitted with acute vertigo. 21 patients were admitted electively, 10 of which were for elective orthopaedic procedures. Of the 10 elective orthopaedic admissions, all had RA. There were 2 THR's, 2 TKR's – biologics suspended appropriately. There was one traumatic wrist fracture, one arthrodesis of MTPs. Of the elective non-orthopaedic admissions, 2 were lap cholecystectomies (treatment held), 2 were ENT procedures, one repair of hernia surgery (treatment held), one reversal of ?Hartman's (treatment held). In one case a new diagnosis of colon cancer was made.

Conclusions: 1. Poor documentation of biologic treatment in discharge summary.
2. Biologics therapy was not highlighted in ECR
3. The communication with the rheumatology department was good (12/12 acute infection)

ABSTRACT 13 (15A104) POSTER PRESENTATION

Intravenous Abatacept versus Subcutaneous injections

Author(s): Khan S, Martin U, Sheehy C

Department(s)/Institution(s): Rheumatology Department, University Hospital Waterford (UHW)

Introduction: Abatacept is a selective T cell co stimulation blocker, used as a Disease Modifying Anti Rheumatic Drug. The Rheumatology day ward in UHW, facilitates in-house infusions as well as follow up of patients on home therapy. Abatacept was initially available only for intravenous use but now can also be administered subcutaneously.

Aims/Background: The aim of the study was to find out the views of the patients who had been treated with intravenous Abatacept in the hospital, and subsequently changed to subcutaneous injections (s/c) at home.

Method: A retrospective study. 30 RA patients on Abatacept were included. An informed consent was obtained. The questionnaire was posted, with a stamped addressed envelope included. 21 patients responded, and their answers were analysed for the results. A 5 points scales used 0: totally disagree, 1: disagree, 2: disagree/agree, 3: agree, 4: totally agree

Results:

Age: 37 - 82

Females: 14, Males: 7

Married: 12, Single: 4, 5 not specified

Housewives: 4, Retired: 2, Nurses: 3, u/e: 3

Abatacept by Infusion helped their arthritis: 9: totally agree

Convenience: 4 totally agree, 6: disagree

s/c injections Confidence: 17 totally agree, 3: agree

Time: 2 totally agree, 5: agree/disagree

Instructions on sharp disposal: 16 totally agree, 4: agree

Prescription collection: 15 totally agree

Pain score: mostly painless

Likes: Staff's interaction

Dislikes: Travelling to the hospital

Would like to go back to infusion: 14 No, 6 Yes

Conclusions: Most of the patients felt the switch was a quite convenient step, which had a positive impact on their quality of life. A small number did express their concern, regarding the responsibility of medications collection, storage, and missing the interaction with the staff

Reference: Arthritis Rheum. 2011 Oct; 63(10): 2854–2864

ABSTRACT 14 (15A105) POSTER PRESENTATION

Management of Osteoarthritis in the General practice and Rheumatology outpatients

Author(s): Shama Khan, Leke Oyedotun, Fayyaz Janjoa, Claire Moore, Donncha O'Gradaigh

Department(s)/Institution(s): Rheumatology Department, University Hospital Waterford

Introduction: Osteoarthritis poses a considerable burden on both primary and secondary care. While both community and hospital based services strive to cope with the demand, integrated approaches using a multi-disciplinary framework and guidelines for management and referral are frequently lacking.

Aims/Background: To evaluate how much conservative measures and services available in the community are utilised in the general practice, before referral to a Rheumatology clinic. We also looked up the number of joints injections, in the Rheumatology Clinic and orthopaedic referral for interventions

Method: A retrospective study. 575 patients were included in the audit. Their 1st and subsequent letters were reviewed. Parameters included were NSAIDs use, physiotherapy referral by GPs, joint injections, NSAIDs and physiotherapy referral from Rheumatology clinic and orthopaedic referral

Results: General practice, NSAIDs: 58.71 %, physiotherapy referral: 21.04%. Rheumatology Clinic, Intra articular injections: 41.39%, NSAIDs: 68.17, physiotherapy: 45.91%, Orthopaedic referrals: 22.95%.

Conclusions: Integrated referral and care pathways are required for efficient and optimal care of patients with osteoarthritis. This will require significant support, education and training for general practice. The concept of GP with special interest would have a quite positive impact.

Reference:

Rheumatology:469-471, 10.1093/rheumatology/keh504



ABSTRACT 15 (15A106) POSTER PRESENTATION

Anti-Tumour Necrosis Factor therapy is a risk factor for certain sub-types of Chronic Rhinosinusitis

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Department(s)/Institution(s): ¹Department of Otorhinolaryngology, Craigavon Area Hospital, Craigavon, Northern Ireland
²Department of Rheumatology, Craigavon Area Hospital, Craigavon, Northern Ireland

Introduction: Chronic Rhinosinusitis (CRS), which is an inflammatory rather than an infective process, is frequently seen in Otorhinolaryngology outpatients. We have seen increasing numbers of patients on Anti-TNF presenting to ENT with the symptoms of CRS.

Aims/Background: The role of Anti-TNF on CRS has not been investigated in depth. Discussion has focused on the therapeutic benefit of Anti-TNF in CRS with nasal polyposis. Our experience points to a detrimental effect in overall prevalence of CRS. We performed a telephone survey to assess the prevalence within our patient group.

Method: We identified Rheumatology patients receiving Anti-TNF treatment. Participants were contacted by telephone, and asked to participate using a standard wording of the survey. Participants reported age, sex and smoking history prior to answering the GA2LEN CRS screening survey based on the EP3OS diagnostic criteria.

Results: 120/234 patients agreed to participate in the survey. The prevalence of CRS in the sample (Anti-TNF) population was 20% (95 %CI 12.84 – 27.16). Anti-TNF is a risk factor for CRS when compared using a one-sample test of proportions with prevalence in the population as reported by GA2LEN for our nearest centres London 10% (8.5 – 11.7%) (p= 0.0003) and Southampton 11.2% (8.8 – 14.3%) (p= 0.0022).

Conclusions: This study shows that rates of CRS increase in patients treated with Anti-TNF. Limitations include sample size and potential confounding factors. The findings are of potential significance to clinicians responsible for the use of anti-TNF therapy and also clinicians treating patients with CRS. It also raises questions regarding the spectrum of conditions we diagnose as CRS.

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ABSTRACT 16 (15A110) POSTER PRESENTATION

Survey of patients with rheumatoid arthritis switching biologic treatments

Author(s): C. Masih, N. Maiden, Elaine Wylie

Department(s)/Institution(s): Department of Rheumatology, Craigavon Area Hospital, Southern Health and Social Care Trust

Introduction: We are aware that patients on biologic therapy often have to switch treatments, sometimes more than once and wanted to study our population of patients with rheumatoid arthritis switching biologic treatments.

Aims/Background: Aims were to assess the reasons for switching therapy (failure or side effects), the length of time that treatments persist and the effectiveness of various biologic treatments when used as a second or third line treatment and beyond.

Method: A retrospective electronic record review was carried out of all patients with rheumatoid arthritis on biologic therapies who had switched treatments since the biologics service was introduced in Craigavon Area Hospital.

Results: Seventy-nine patients switched biologic treatments. Twenty-four required a third biologic and seven a fourth. One patient required six biologics. The main reasons for switching therapy were primary or secondary failure. The rate of adverse effects was approximately 20% for all biologics except infliximab (for which numbers were small) and rituximab which had a rate of 6%. Side effects included infections, injection site reactions, neutropenia and other recognised adverse effects. Two deaths were unrelated to biologic treatment. Rituximab was the most efficacious biologic when used second or third line with success rates of 81% and 80%. Where abatacept or an anti-TNF biologic was used second line success rates were 50% or less. Tocilizumab was efficacious though numbers were fewer.

Efficacy still going strong five years on

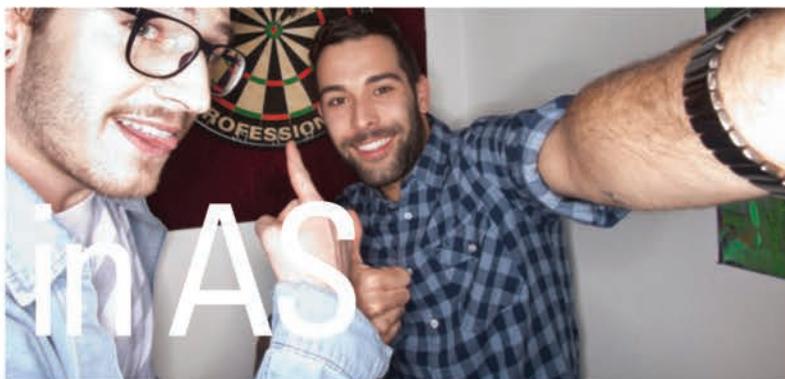
monthly 
Simponi[®]
golimumab



Indicated for the treatment of moderate to severe, active rheumatoid arthritis in adult patients in combination with MTX when response to DMARDs therapy, including MTX, has been inadequate.



Indicated for the treatment of active and progressive psoriatic arthritis in adult patients when the response to DMARDs has been inadequate.



Indicated for the treatment of severe, active ankylosing spondylitis in adult patients who have responded inadequately to conventional therapy.

Simponi 50 mg, 100 mg Solution for Injection in pre-filled pen.

Simponi 50 mg Solution for Injection in pre-filled syringe (golimumab).

Prescribing Information [Refer to full SPC text before prescribing Simponi (golimumab)]. **Indications:** *Rheumatoid Arthritis (RA):* Simponi, in combination with methotrexate (MTX), is indicated for the treatment of moderate to severe, active rheumatoid arthritis in adults when the response to disease-modifying anti-rheumatic drug (DMARD) therapy including MTX has been inadequate; the treatment of severe, active and progressive rheumatoid arthritis in adults not previously treated with MTX. Simponi, in combination with MTX, has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function; *Psoriatic Arthritis (PsA):* Simponi, alone or in combination with MTX, is indicated for the treatment of active and progressive PsA in adults when the response to DMARD therapy has been inadequate. Simponi has been shown to reduce the rate of progression of peripheral joint damage as measured by X-ray in patients with polyarticular symmetrical subtypes of the disease and to improve physical function. *Ankylosing Spondylitis (AS):* Simponi is indicated for treatment of severe, active AS in adults who have responded inadequately to conventional therapy. *Ulcerative colitis (UC):* Simponi is indicated for treatment of moderately to severely active UC in adult patients who have had an inadequate response to conventional therapy including corticosteroids and 6-mercaptopurine (6-MP) or azathioprine (AZA), or who are intolerant to or have medical contraindications for such therapies. **Dosage and administration:** Simponi should be injected subcutaneously. Treatment should be initiated and supervised by qualified physicians experienced in the diagnosis and treatment of RA, PsA, AS or UC. After proper training in subcutaneous injection technique, patients may self-inject, if their physician deems it appropriate. *RA:* Simponi 50 mg given once a month, on the same date each month, concomitantly with MTX. *PsA:* Simponi 50 mg given once a month, on the same date each month, alone or in combination with MTX. *AS:* Simponi 50 mg given once a month, on the same date each month. Clinical response is usually achieved within 12-14 weeks of treatment (3 or 4 doses). Continued therapy should be reconsidered in patients who show no evidence of therapeutic benefit within this time period. In patients weighing more than 100 kg who do not achieve an adequate clinical response after 3 or 4 doses, increasing the dose of golimumab to 100 mg once a month may be considered, taking into account the increased risk of certain serious adverse reactions with the 100 mg dose compared with the 50 mg dose. *UC:* Patients weighing < 80 kg: Simponi given as an initial dose of 200 mg, followed by 100 mg at week 2, then 50 mg every 4 weeks. Patients weighing ≥ 80 kg: Simponi given as an initial dose of 200 mg, followed by 100 mg at week 2, then 100 mg every 4 weeks. During maintenance treatment, corticosteroids may be tapered, following clinical practice guidelines. Clinical response is usually achieved within 12-14 weeks of treatment (after 4 doses). Missed dose: If a patient forgets to inject Simponi on the planned date, the forgotten dose should be injected as soon as the patient remembers. The patient should be instructed not to inject a double dose. *Elderly patients (≥ 65 years):* no dose adjustment required. *Pediatric patients (< 18 years) and patients with renal and hepatic impairment:* Simponi is not recommended in these populations. **Contraindications:** Patients with a hypersensitivity to golimumab or any of the excipients. Patients with active tuberculosis (TB) or other severe infection such as sepsis and opportunistic in-

fections; patients with moderate or severe heart failure (NYHA class III/IV). **Precautions and Warnings:** **Infections:** Patients must be monitored closely for infection before, during and for 5 months after cessation of treatment. Exercise caution when considering Simponi in patients with chronic infection or a history of recurrent infection including use of concomitant immunosuppressive therapy. Simponi should not be given to patients with clinically important active infection. Patients should be advised of the potential risk factors. Bacterial infections (including sepsis and pneumonia), mycobacterial (including TB), invasive fungal and opportunistic infections, including fatalities, have been reported. There was a greater incidence of serious infections, including opportunistic infections and TB, in patients receiving golimumab 100 mg compared with patients receiving golimumab 50 mg. Serious infections have occurred in patients on concomitant immunosuppressive therapy that, in addition to their underlying disease, could predispose them to infection. There have been reports of active TB in patients receiving Simponi, including patients previously treated for latent TB. Patients should be evaluated for active or latent TB before Simponi treatment. All such tests should be recorded on the Patient Alert Card provided with the product. If active TB is diagnosed, treatment with Simponi should not be initiated. If latent TB is diagnosed, treatment with anti-TB therapy must be initiated before initiation of Simponi. Patients on Simponi should be monitored closely for signs and symptoms of active TB and advised to seek medical advice if signs and/or symptoms of TB appear. **Hepatitis B (HBV) reactivation:** Reactivation of HBV occurred in patients receiving Simponi who were chronic carriers. Some cases had a fatal outcome. Patients should be tested for HBV infection before initiating treatment with Simponi. **Malignancies and lymphoproliferative disorders:** Caution is advised when considering Simponi treatment in patients with history of malignancy or continuing treatment in patients who develop a malignancy, additional caution should be exercised in patients with increased risk for malignancy due to heavy smoking. A risk for the development of malignancies in children and adolescents cannot be excluded. Rare cases, usually fatal, of hepatosplenic T-cell lymphoma (HSTCL) have been reported, the majority of cases occurred in adolescent and young males nearly all on concomitant treatment with azathioprine (AZA) or 6-mercaptopurine (6-MP). The potential risk with the combination of AZA or 6-MP and Simponi should be carefully considered. A risk for the development for HSTCL in patients treated with TNF-blockers cannot be excluded. Colon dysplasia/carcinoma - Screen for dysplasia in all patients with UC who are at increased risk or had a prior history for dysplasia or colon carcinoma. In newly diagnosed dysplasia patients the risks and benefits of continued Simponi use should be carefully assessed. Melanoma (all TNF-blocking agents including Simponi) and Merkel cell carcinoma (other TNF-blocking agents) have been reported; periodic skin examination is recommended, particularly for patients with risk factors for skin cancer. **Heart Failure:** Simponi should be used with caution in patients with mild heart failure (NYHA class I/II) and discontinued in the event of worsening symptoms of heart failure. **Neurological events:** Use of anti-TNF therapy, including Simponi, has been associated with cases of new onset or exacerbation of clinical symptoms and/or radiographic evidence of central nervous system demyelinating disorders, including multiple sclerosis and peripheral demyelinating disorders. Discontinuation of Simponi should be considered if these disorders develop. Carefully consider the benefits and risks before initiation of therapy in patients with a history of demy-

The GO studies

Recently presented five-year data confirm good persistence, sustained efficacy and predictable tolerability across indications with Simponi¹⁻³

Persistence with Simponi at 5 years

(Simponi 50mg and 100mg)



GO-FORWARD¹

70%

n=444



GO-REVEAL²

69%

n=405



GO-RAISE³

71%

n=356

linating disorders. **Surgery:** Patients requiring surgery whilst on Simponi therapy should be closely monitored for infections. **Autoimmune processes:** If a patient develops symptoms suggestive of a lupus-like syndrome following treatment with Simponi and is positive for antibodies against double-stranded DNA, treatment should be discontinued. **Haematological reactions:** There have been post-marketing reports of pancytopenia, leucopenia, neutropenia, aplastic anaemia, and thrombocytopenia in patients receiving TNF-blockers. **Cytopenias** including pancytopenia have been reported infrequently in clinical trials. Patients should be advised to seek medical attention if they develop signs and symptoms suggestive of blood dyscrasias. Discontinuation should be considered in patients with significant haematologic abnormalities. **Vaccinations/therapeutic infectious agents:** It is recommended that live vaccines or any therapeutic infectious agents should not be given concurrently. **Allergic reactions:** If an anaphylactic reaction or other serious allergic reaction occurs, administration of Simponi should be discontinued immediately, and suitable treatment initiated. The needle cover of the pre-filled pen contains latex and may cause allergic reactions in those sensitive to latex. **Special populations:** Adverse events, serious adverse events and serious infections in patients aged ≥65 were comparable to those observed in younger patients. However, caution should be exercised when treating the elderly, particular attention should be paid to infections. Simponi contains sorbitol (E420). Patients with rare hereditary problems of fructose intolerance should not take Simponi. **Interactions:** Combination of Simponi and other biological therapeutics used to treat the same conditions as Simponi, including anakinra and abatacept is not recommended. **Pregnancy and Lactation:** Administration of Simponi is not recommended during pregnancy or breast-feeding. Women of childbearing potential should use adequate contraception and continue its use for at least 6 months after the last Simponi treatment. **Side-effects: Refer to SmPC for complete information on side effects. Very Common (≥ 1/10):** upper respiratory tract infection; **Common (≥ 1/100):** bacterial infections, lower respiratory tract infections, viral infections, bronchitis, sinusitis, superficial fungal infections, abscess, anaemia, allergic reactions, autoantibody positive, dizziness, headache, paraesthesia, hypertension, asthma and related symptoms, dyspepsia, gastrointestinal and abdominal pain, nausea, gastrointestinal inflammatory disorders, stomatitis, alanine aminotransferase increased, aspartate aminotransferase increased, pruritus, rash, alopecia, dermatitis, pyrexia, asthenia and injection site reaction, chest discomfort, were reported. Serious, including fatal adverse events have been reported including septic shock, lymphoma, leukaemia, melanoma, Merkel cell carcinoma*, hepatosplenic T-cell lymphoma*, leucopenia, thrombocytopenia, pancytopenia, aplastic anaemia, serious systemic hypersensitivity reactions (including anaphylactic reaction), skin exfoliation, vasculitis (systemic), sarcoidosis, demyelinating disorders, congestive heart failure, arrhythmia, ischaemic coronary artery disease, thrombosis, Interstitial lung disease and lupus-like syndrome. *Observed with other TNF-blocking agents, but not observed in clinical studies with golimumab. **Package quantities:** 1 50 mg pre-filled pen containing 50 mg of golimumab in 0.5 ml solution for injection or 1 50 mg pre-filled syringe containing 50 mg of golimumab in 0.5 ml solution for injection or 1 100 mg pre-filled pen containing 100 mg of golimumab in 1 ml solution for injection. **Legal Category:** Prescription Only Medicine. **Marketing Authorisation Number:** 50 mg Pre-filled Pen EU/1/09/546/001; 50 mg Pre-filled Syringe EU/1/09/546/003; 100 mg Pre-filled Pen EU/1/09/546/005.

Marketing Authorisation Holder: Janssen Biologics B.V., Einsteinweg 101, 2333 CB Leiden, The Netherlands. **Date of Revision of Text:** February 2015. © Merck Sharp & Dohme Ireland (Human Health) Limited, 2015. All rights reserved. **Further information is available on request from: MSD, Red Oak North, South County Business Park, Leopardstown, Dublin 18 or from www.medicines.ie. **Date of preparation:** March 2015.**

Adverse events should be reported. Reporting forms and information can be found at www.hpra.ie
Adverse events should also be reported to MSD (Tel: 01-299 8700)

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Conclusion: Rituximab was the most efficacious and had a low rate of side effects when used second or third line. There was a low rate of withdrawal from biologic treatment within the cohort of patients switching biologics.

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ABSTRACT 17 (15A112) POSTER PRESENTATION

The Impact of Foot Problems in Patients with Rheumatoid Arthritis

Author(s): Maeve Boyle, Michelle McHenry

Department(s)/Institution(s): Royal Victoria Hospital Belfast

Introduction: Foot problems in patients with Rheumatoid Arthritis (RA) are extremely common, estimates range from 32% to 75% (1) However, in busy outpatient clinics foot problems are often neglected and some secondary care centres do not have access to a foot care service. According to NICE guidelines all patients with RA and foot problems should be reviewed by podiatry (2).

Aims/Background: To assess the prevalence and severity of foot problems in patients with Rheumatoid Arthritis attending routine Rheumatology Outpatient Clinic in the Royal Victoria Hospital over a 3 week period.

Method: Patients with RA completed an anonymous questionnaire of 61 questions, assessing the type and severity of foot symptoms, taken from the Salford Rheumatoid Arthritis Foot Evaluation Tool (3).

Results: 46 patient questionnaires completed. The results show the high proportion of patients with RA who experience foot pain. They also highlight specific problems such walking difficulty, low mood, a feeling of being restricted in activities and hobbies, self-consciousness about their feet and an overall large impact on their quality of life.

Conclusions: Recent years have seen major improvements in treatment of RA, with the ability to achieve early and sustained disease control in the majority of patients. However, foot problems continue to have a significant impact on many patients' quality of life. There is a large variation in the standard of foot care received by patients and many have an unmet need for podiatry input. These results highlight the need for closer attention to foot problems when reviewing patients and the need a foot care service in secondary care for patients with RA.

References:

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ABSTRACT 18 (15A113) POSTER PRESENTATION

Vaccination uptake in patients with inflammatory arthritis in a single rheumatology department in the South East of Ireland

Author(s): E Fitzpatrick, L Bell, S Khan, P Dreelan, B Peelo, U Martin, C Sheehy.

Department(s)/Institution(s): Dept. of Rheumatology, University Hospital Waterford

Introduction: Patients with inflammatory arthritis have a higher risk of infection than the general population. The national immunisations office recommends an annual influenza vaccine¹ and also at least one pneumococcal vaccine² in all patients taking immunosuppressants. EULAR also recommend these vaccines for patients with inflammatory arthritis.³ Our aim was to establish vaccination uptake rates in different treatment groups and to determine where patients are educated about vaccines.

Method: A patient questionnaire was designed, and distributed to patients attending rheumatology OPD and day ward in October 2014. The results were pooled and analysed.

Results: A total of 71 were included for analysis. There were 31 (43.7%) males and 40 (56.3%) females; the age range was from 17 to 80 years with a mean of 55.9 years. 48 (67.6%) patients had rheumatoid arthritis, 19 (26.8%) had psoriatic arthritis, 2 (2.8%) each had ankylosing spondylitis and Still's disease. 74.6% of patients (n=53) had an influenza vaccine in the previous 12 months. 32.4% (n=23) had previously had a pneumococcal vaccine, whereas 67.7% (n=48) had never it. The majority of patients (88.7%) had previously had a varicella infection. Of the 8 that had not, only 3 were certain they had been vaccinated. There was no statistical significance in vaccination uptake between patients receiving DMARDs only compared to those receiving subcutaneous and intravenous biologic therapy. The patients were asked who advised them about vaccinations; 55% were advised by the GPs, 28% were advised by hospital healthcare professionals and a further 14% were advised by both GPs and hospital staff.

Discussion: We found a greater uptake of influenza vaccine than pneumococcal vaccine, this has been previously noted in the literature.^{4,5} This may be a reflection of the lack of a formal pneumococcal immunisation program in Ireland. Patients on anti-TNF therapy were not more likely to be vaccinated than those on DMARDs only. We propose establishing vaccination status prior to starting immunosuppressant therapy. This may



involve checking varicella titres in those where previous infection is uncertain and making pneumococcal vaccination mandatory before starting biologic therapy.

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ABSTRACT 19 (15A117) POSTER PRESENTATION

Psoriatic Arthritis patients with work disability have worse quality of life compared to those who are employed

Author(s): Flora Farkas, Agnes Szentpetery, Phil Gallagher and Oliver FitzGerald

Department(s)/Institution(s): Department of Rheumatology, St. Vincent's University Hospital, Dublin, Ireland

Introduction: Work disability (WD) is an important functional outcome measure in inflammatory arthritis. WD has been studied comprehensively in rheumatoid arthritis and ankylosing spondylitis, however limited data is available in psoriatic arthritis (PsA) ^{1, 2}.

Aims/Background: To compare clinical parameters, physical function, quality of life, economic measures and radiographic damage in patients with WD to those who are employed in PsA.

Method: Consecutive patients with PsA fulfilling the CASPAR criteria were enrolled. Two subgroups were created, those with WD and those currently employed. Patients on disability pension, early retirement due to arthritis, those unemployed, away from work for the last 12 months due to sick leave, rehabilitation or hospital admission related to arthritis were considered as having WD. Disease activity measures (TJC, SJC, ESR, CRP, DAS28-ESR/CRP, PASI), medication history, economic data and patients reported measures (HAQ, EQ-5D, SF-36, BASDAI, BASFI, ASQoL, DLQI, PAIN VAS) were compared between the 2 subgroups.

Results: 150 patients were recruited of whom 92 filled out the economic questionnaire. 11 were students or natural retirees, leaving 81 patients available for analysis. While there was no significant difference in disease activity measures and the number of erosions between the 2 subgroups, patients with WD were older and had significantly worse self-reported values

| | Work disability n=38 | Employed n=43 | p-value |
|-----------------------|-------------------------|------------------|---------|
| Age | 54 ± 9.4 | 47 ± 10.6 | 0.006 |
| PAIN VAS (0-10) | 4.81 ± 2.83 | 3.05 ± 2.72 | 0.006 |
| FATIGUE (0-10) | 5.83 ± 2.69 | 3.31 ± 2.56 | <0.0001 |
| HAQ (0-3) | 0.81 ± 0.64 | 0.38 ± 0.52 | 0.001 |
| SF-36 PCS (0-100) | 35.88 ± 7.80 | 43.80 ± 9.96 | <0.0001 |
| SF-36 MCS (0-100) | 44.50 ± 14.92 | 51.85 ± 11.02 | 0.043 |
| EQ-5D SCORE (-0.59-1) | 0.61 ± 0.25 | 0.80 ± 0.20 | <0.0001 |
| BASDAI (0-10) | 4.33 ± 2.43 | 2.81 ± 2.16 | 0.009 |
| BASFI (0-10) | 3.42 ± 2.37 | 1.80 ± 2.02 | 0.004 |
| ASQoL (0-18) | 7.07 ± 5.31 | 3.41 ± 4.63 | 0.003 |
| GVAS (0-100 mm) | 62.69 ± 20.55 | 75.74 ± 14.98 | 0.005 |

compared to those who are employed. More patients were on biologic treatment in the employed group, while most of the WD patients were on DMARDs.

Conclusion: Despite similar disease activity and structural damage measures, patients with WD had worse physical function, and overall reduced quality of life compared to employed patients.

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ABSTRACT 20 (15A118) POSTER PRESENTATION

Results from a registry of patients with Ankylosing Spondylitis attending The North Western Rheumatology Unit

Author(s): Orla Reynolds, Maria Lynch, Bernie McGowan, Bryan Whelan, Carmel Silke

Department(s)/Institution(s): The North Western Rheumatology Unit, Our Lady's Hospital, Manorhamilton, Co Leitrim

Introduction: Ankylosing spondylitis (AS) is a complex, debilitating disease that is insidious in onset, progressing to radiological sacroiliitis over many years¹.

Aims/Background: In collaboration with the National Ankylosing spondylitis Registry of Ireland (ASRI) The NWRU commenced the collection and recording of information pertaining to the management of patients with a diagnosis of Ankylosing spondylitis (AS).

Method: The database is a web-based questionnaire, which contains sections on demographic data, personal and family history, systemic and musculoskeletal examination, laboratory results, co-morbidities along with pharmacological management. Since June 2014, relevant information on 54 patients attending The North Western Rheumatology Unit has been included in the registry. This study provides an overview of some of the descriptive information and patient characteristics of the initial cohort.



Results: The registry contains information on 54 patients, 51 males [94%]; mean age 49 ± 12.6 years. Mean disease duration of the cohort was 11.9 ± 9.9 years, and mean duration of symptoms 22.9 ± 12.4 years. HLA-B27 positivity was detected in 83.3% of patients. Manifestations of extraarticular involvement were uveitis (37%), psoriasis (11%), dactylitis (11%) and inflammatory bowel disease (3.7%). In 28 (51.8%) of the patients, the BASDAI score was ≥ 4 and in 30 (55%) of patients the BASFI was ≥ 4 . Of the 50 (93%) patients prescribed biologic therapies, 39% were using adalimumab, 37% were prescribed Etanercept, a further 11% were taking infliximab and 3.7% and 1.9% were being treated with Golimumab and Certolizumab respectively. In total 15 patients (27.8%) had a diagnosis of hypertension, 20% had hyperlipidaemia and a further 11%, 7.4% and 13% had a diagnosis of diabetes, peptic ulcer disease and depression respectively

Conclusion: The ASRI gives information on the clinical and demographic profiles of patients, along with information on quality of life measurements and disease activity scores.

Reference:

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ABSTRACT 21 (15A120) POSTER PRESENTATION

An evaluation of the efficacy of drug dosing based on SUA levels in patients with repeat SUA levels: analysis of data from a linked database of laboratory and pharmacy claims data

Author(s): Bernie McGowan¹, Deepti Ranganathan¹, Kath Bennett³, Carmel Silke¹, Bryan Whelan^{1, 2}

Department(s)/Institution(s): ¹North Western Rheumatology Unit, OLHM, Co. Leitrim
²Department of Medicine, NUIG, Galway
³Department of Pharmacology and Therapeutics, Trinity Centre for Health Sciences, Dublin 8

Introduction: EULAR¹ and ACR² guidelines recommend initiating ULT at a low dose (e.g. allopurinol at 100mg/day) and up-titrating the drug dose, so as to reach the target SUA level of <360 micromoles.

Aims/Background: To identify if EULAR and ACR guidelines are adhered to in clinical practice in relation to appropriate dosing of allopurinol for the management of gout and to evaluate the efficacy of drug dosing based on SUA levels in patients with repeat SUA levels post initiation of treatment.

Method: This was a retrospective study involving a combined data set of the HSE-PCRS database and hospital laboratory data linked using the patients HSE-PCRS number between January 2008 and December 2012. All patients included in the study were followed through for 12 months post initiation of therapy. Patients were stratified into 3 groups: 1) commenced on allopurinol 100mg and remained on 100mg, 2) commenced on allopurinol 300mg and remained on 300mg, 3) commenced on allopurinol 100mg and gradually up titrated to 300mg.

Results: In total 9520 patients were identified as having a HSE-PCRS number and included in the study. In total 620 (7%) of the HSE-PCRS patients had received any urate-lowering therapy between January 2008 and December 2012. Only 264 of the patients had at least 1-year follow-up of ULT. In total 107 (41%) patients had repeat SUA levels taken after baseline. Only 12 (4.3%) had follow-up uric acid test after baseline test and 6.5% were up titrated from 100mg to 300mg.

Conclusions: The results of our study do not demonstrate adherence to the current EULAR, ACR or NICE guidelines in the management of gout in the Irish setting.

References: 1. EULAR Standing Committee for International Clinical Studies Including Therapeutics. EULAR evidence based recommendations for gout. Part II: Management. Report of a task force of the EULAR Standing Committee for International Clinical Studies Including Therapeutics (ESCISIT). *Ann Rheum Dis*. 2006 Oct;65(10):1312–24. Epub 2006 May 17
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ABSTRACT 22 (15A121) POSTER PRESENTATION

Adherence to Methotrexate and Anti-TNF therapy in Rheumatoid Arthritis:

Author(s): Bernie McGowan¹, Kath Bennett³, Carmel Silke¹, Bryan Whelan^{1, 2}

Department(s)/Institution(s): ¹North Western Rheumatology Unit, OLHM, Co. Leitrim
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Introduction: Nonadherence to prescribed medications is associated with disease flares and increased disability in patients with Rheumatoid Arthritis^{1, 2}. Despite this, adherence rates to prescribed medicine regimes in people with RA are low, varying from 30 to 80%³.

Aims/Background: To evaluate the effect of different concomitant DMARDs on the persistence with anti-TNF therapies in patients with RA.

Method: This was a retrospective study involving a combined data from the HSE-PCRS and High Tech Drugs Scheme Databases. All new users of anti-TNF alpha > 16 years of age were identified from the HTD scheme from 2012–2014 inclusive. Non-persistence was identified at 6 months and 12 months post-index dispensing date. Time to non-persistence was examined using Cox Proportional Hazards models, with predictors of co-prescribed DMARDs including methotrexate with or without sulfasalazine or leflunomide. Adjustments were also made for age, gender and number of co-prescribed drugs. Analysis was performed using SAS v9.3 (Cary Institute, USA) and significance at $p < 0.05$ is assumed.

Results: There were $n=3094$ new initiators of any anti-TNF



alpha between Jan 2012 and June 2014 with sufficient data for analysis of non-persistence. 84.45% were persistent at 6 months and 68.6% were persistent at 12 months. Patients not co-prescribed DMARDs were most likely to become non-persistent to therapy by 6 months. Patients receiving no DMARD or Sulfasalazine were more likely to discontinue their anti-TNF than patients receiving anti-TNF in combination with methotrexate at 12 months. Patients with increased number of co-morbidities demonstrated poorer persistence to treatments at 6 and 12 months.

Conclusion: Patients co-prescribed DMARDs in particular methotrexate show greater persistence to anti-TNFs than patients treated with anti-TNFs alone.

References:

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3. Bart JF van den Bemt, Hanneke E Zwikker, Cornelia HM van den Ende. Medication adherence in patients with rheumatoid arthritis: a critical appraisal of the existing literature. *Expert Rev. Clin. Immunol.* 8(4), 337–351 (2012).

ABSTRACT 23 (15A122) POSTER PRESENTATION

Myeloid related Proteins 8 and 14 (MRP 8/14) - Biomarkers of Arthritis in Children with Trisomy 21 (T21)?

Author(s): C Foley, EJ MacDermott, D Veale, OG Killeen

Department(s)/Institution(s): NCPR OLCHC; SVUH

Introduction: MRP8/14 are calcium-binding proteins secreted by infiltrating phagocytes in synovial inflammation. Studies suggest their concentration in serum/synovial fluid (SF) represent useful markers of inflammation in JIA. MRP8/14 have never been studied in DA.

Aims/Background: Determine the accuracy of standard (CRP & ESR) and novel (MRP 8/14) inflammatory markers, as biomarkers of disease in DA, compared with JIA

Method: Over 12 months, new cases of JIA and DA attending the NCPR had blood drawn to measure CRP, ESR and MRP 8/14 levels. Corresponding AJC was documented. Paired SF samples were taken for analysis from children requiring steroidJIs.

Results: MRP8/14, ESR and CRP were measured in serum of DA (n=34) and JIA (n=50) patients. In a subgroup, MRP8/14 levels were also quantified in pairedSF; DA (n=3), JIA (n=21). At diagnosis, ESR and CRP levels were raised in a lower percentage of DA cases compared with our JIA cohort, even though on average, a higher AJC was observed in the DA cohort. In JIA, ESR was raised in almost 75% at diagnosis, suggesting that it is a more useful marker of inflammation in this patient group (p<0.05). SerumMRP 8/14 levels were also significantly

higher in JIA compared to DA, levels of which correlated with ESR(r=0.312, p < 0.05). No correlation between serumMRP 8/14 and CRP/ESR was observed for DA.

Conclusion: Preliminary data has shown SFMRP 8/14 levels are higher than their paired serum levels in DA, and correlate with AJC. Our observations in DA may suggest that there is dissociation between systemic and local inflammation in this patient group. Further studies are planned.

References:

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ABSTRACT 24 (15A123) POSTER PRESENTATION

Possible correlation between seasonal body composition changes in a senior gaelic football team and macro nutrient intake values

Author(s): Fintan Whelan¹, Sarah McDonald², Bernie McGowan², Bryan Whelan², Carmel Silke²

Department(s)/Institution(s): ¹Department of Life Sciences, Sligo IT.

²The North Western Rheumatology Unit, Our Lady's Hospital, Manorhamilton, Co. Leitrim

Introduction: Increases in lean mass increase the force of muscular contractions making athletes more energy efficient when performing¹. In order to maximize performance elite Gaelic players need to achieve an optimum sport-specific body size and body composition.

Aims/Background: To analyse seasonal changes in body composition in a senior inter county Gaelic team and to identify a possible correlation between body composition measures and macro nutrient intake values.

Method: Body Composition Analyses was performed on 31 members of a senior inter county gaelic team at 2 separate study points 2014/2015 using dual energy x-ray absorptiometry (DXA) at the The North Western Rheumatology Unit. Results were compared to recommended values for athletes². Nutritional assessment was conducted using the validated EPIC Norfolk Food Frequency Questionnaire³.

Results: There was a decrease in mean percentage tissue fat from 15.89 (±SD 5.37) at pre-season to 14.65, (± SD 4.80) at mid-season with a corresponding increase in the mean lean mass. The players achieved the minimum recommended intake of protein, carbohydrate, iron and calcium but exceeded recommendations for fat % energy and saturated fat % energy. The mean values for fibre and Vit D were significantly lower than the recommended values. The players reported consuming a mean daily total of 1843.99, ±426 calories, lower than the



recommended intake of 2400 to 2800 calories for athletes. There was no positive correlation identified between percentage tissue fat changes and various micro and macro nutrient intake.

Conclusion: Monitoring of body composition changes and dietary intake during a competitive playing season provide players and their management with valuable information in relation to reaching the required level of peak physical condition.

References:

1. Ostojic, S. (2003). Characteristics of elite and non-elite Yugoslav soccer players: correlates of success. *Journal of Sports Science and Medicine* 2,34-35
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ABSTRACT 25 (15A131) POSTER PRESENTATION

Analysis of data from Treat to Target (T2T) in early Rheumatoid Arthritis Patients – Interim results from Registered Advanced Nurse Practitioner (RANP) clinic

Author(s): Harrington, N. McGowan, B. Whelan, B. Silke, C. Whelan, F.

Department(s)/Institution(s): North West Rheumatology Unit, Our Lady Hospital Manorhamilton

Introduction: The 2010 European League Against Rheumatism (EULAR) recommend that rheumatoid arthritis (RA) patients should ultimately strive for remission with low disease activity (LDA) as an alternative goal within six months of diagnosis (2). The RANP with prescriptive authority can escalate or combine DMARD treatments as per agreed local protocol based on current guidelines from the European League against Rheumatism (1,2).

Aims/Background: The aim was to develop, implement, and evaluate a treat-to-target strategy aimed at achieving remission in newly diagnosed RA in daily clinical practice.

Method: From August 2014, following consultant diagnoses of RA, patients were referred to the RANP for 1 year follow up from diagnosis. Data on disease history, management & outcomes are collected at each visit. As per T2T recommendations 4-6 week assessment of disease activity was recorded using Clinical Disease Activity Index (CDAI) until low disease activity was achieved.

Results: Fifty nine patients (61% female) following a consultant diagnosis of new onset RA and initiation of DMARD were referred to the T2T clinic. The mean follow time was 6 months (min 1 month, max 11 months). The mean age was 54yrs (SD 16, min 19, max 86). DMARD treatment adjustments were based on CDAI aiming at CDAI remission of <2. Duration of symptoms before referral to rheumatologist were documented, 15 (25%) were referred within 3 months of symptom onset with 21(36%) referred within 3-6 months, 19% had symptoms > 1 year before referral. Following referral 32% were seen within 6 weeks of referral, 37% waited 6-12 weeks, 20% waited 3-6 months and 10% were seen within 6-12 months.

Mean baseline CDAI was 22 with SD 11 (min 2, maximum 67), 2 pts had baseline LDA and were on steroid treatment. A total of 26 (44%) of patients had been treated with steroids for symptoms prior to review. Target of disease remission was agreed with 53 (89.9%) of patients, target of LDA agreed with 6 (10.1%) of patients. 4 patients were excluded from analysis of remission data as diagnosis reclassified. To date 42 pts (76%) have achieved LDA. 46 (83%) of patients had >3month follow up with 23 (50%) of these achieving CDAI disease remission.

Conclusions: The implementation of this Nurse led treat-to-target strategy aiming at remission demonstrated that achieving remission in daily clinical practice is a realistic goal. This study is ongoing further results will be presented in due course.

References: 1) Palmer D, El Miedany Y (2014) *British Journal of Nursing*; Rheumatoid arthritis: Recommendations for treat to target. 23: 6, 310-315. 2) Smolen JS et al (2014). *Annals of Rheumatic Diseases*.; EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2013 update

ABSTRACT 26 (15A132) POSTER PRESENTATION

Identification of novel DC subsets in the RA joint which induce T cell function, and activation of which are potentiated by the hypoxic environment of the joint

Author(s): Canavan M, O'Rourke M, Orr C, Fletcher J, Veale DJ, Fearon U

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre and Conway Institute of Biomolecular and Biomedical Research, Dublin 4, Ireland

Aims/Background: Dendritic cells (DC) are antigen presenting cells which link both innate and adaptive immunity. In this study we characterise novel DC population within the inflamed RA synovium, examine their effect on T-cell function, and demonstrate that the hypoxic microenvironment of the joint can potentiate these mechanisms.

Method: RA synovial tissue was obtained from site of inflammation at arthroscopy. For characterisation of synovial tissue DC, biopsies were digested, and in parallel with synovial fluid/peripheral blood mononuclear cells (SFMC/PBMC), gated on CD45+ cells. DC were then defined as HLADR+, Lineage-, and cell surface expression of CD11c, CD1, CD141, CD123, CD80, CD83 and CD40 was assessed by Flow-cytometry. To analyse the effect of the inflamed microenvironment on DC activation and function, cells were cultured with RA synovial explant conditioned media (ECM) and synovial fluid (SF) under normoxic or hypoxic conditions, and activation/function assessed by flow cytometry. Finally monocyte (Mo) derived-DC were treated with ECM and RA SF and co-cultured with CD4+ T-cells for 5 days, supernatants harvested and T-cells restimulated with PMA (50ng/ml) and Ionomycin (500ng/ml) and intracellular cytokines expression quantified.

Results: In this study we demonstrated a significant increased gradient in DC maturation markers CD40 and CD80 as DC migrate from blood, to fluid and finally to the synovial tissue (p<0.05;p<0.05;p<0.05).



Conclusions: We have identified differential DC sub-population localized to the RA inflamed joint which are more activated, induce T-cell function and effects of which are potentiated by the hypoxic nature of the joint.

ABSTRACT 27 (15A135) POSTER PRESENTATION

Resolution of TLR2-induced inflammation through manipulation of metabolic pathways

Author(s): McGarry T, Biniecka M, Cregan S, Veale DJ, Fearon U

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre and Conway Institute of Biomolecular and Biomedical Research, Dublin 4, Ireland

Introduction: Toll-like receptors are innate immune receptors known to regulate infection and inflammation. However exciting new evidence is emerging to suggest they are also involved in regulation of impaired mitochondrial function and metabolism.

Aims/Background: In this study we examine the effect of TLR2 on mitochondrial function, metabolic pathways and subsequent synovial inflammation in RA.

Method: RA synovial explants and primary RA synovial fibroblasts (RASFC) were cultured with TLR2-ligand PAM3Cysk4 (1ug/ml). Expression of inflammasome components NLRP3 and pro/active forms of IL-1b, IL-18 and caspase-1 were quantified by Taqman PCR and ELISA. Mitochondrial and glucose metabolism gene arrays were quantified by Real-Time PCR. Alterations in the synovial mitochondrial genome was assessed using a Random Mutation Capture assay and mitochondrial structure by transmission electron microscopy. Reactive oxygen species (ROS), mitochondrial membrane potential (MMP) and mitochondrial mass (MM) were quantified using fluorescent probes and M2 isoform of pyruvate kinase (PKM2) by Real-time PCR/western blot. Finally we examined the effect of TLR2 in the presence of a glycolytic inhibitor 3-(3-pyridinyl)-1-(4-pyridinyl)-2-propen-1-one (3PO)(10uM) on RASFC cytokine production, invasion and endothelial cell tube formation.

Results: TLR2 activation significantly induced NLRP3, Caspase-1, IL-1 β and IL-18 expression in RA explants ex-vivo (all $p < 0.05$).

Conclusions: TLR2 activation promotes mitochondrial dysfunction, resulting in a metabolic shift to glycolysis, reprogramming of which resulted in resolution of TLR2-induced inflammation. These results show close interplay between TLR2 signalling and metabolism, further elucidation of these interaction may provide new insights to new therapeutic approaches.

ABSTRACT 28 (15A136) POSTER PRESENTATION

Falls and Polypharmacy in a Rheumatology Rehabilitation Setting: The Importance of Rehabilitation and Medication Review

Author(s): McDonough A, O'Reilly A, Mongey A

Department(s)/Institution(s): Department of Rheumatology, St. Vincent's University Hospital

Introduction: Due to our ageing population, it is anticipated that the rates of falls and the complications of falls will rise. Rheumatology patients are at higher risk due to their underlying diagnosis¹ which also puts them at higher risk of the consequences of falls, such as osteoporotic fracture. Polypharmacy (defined as 5 or more medications) is another common contributing factor which can further increase this risk.

Aims/Background: To collect data on patients admitted for rheumatology rehabilitation regarding polypharmacy and falls.

Method: We obtained routine data on patients aged over 50 years who were admitted to Harold's Cross rheumatology rehabilitation centre. Medication lists were reviewed and analysed for falls related medications. Details of patients falls and those requiring hospitalisation within the preceding year were also collected.

Results: 43 inpatients over a 6 week period were selected at random. The average number of medications per patient was 8 with 2.6 accounting for falls-related medications. 88% of patients were taking 5 or more medications. 46.5% were taking regular opioids, with 27.9% taking sedatives and 11.6% taking benzodiazepines, all of which are associated with a high falls risk². 32.6% had fallen within the preceding year, with 21% of these requiring hospitalisation. This group represented an older cohort, with an average age of 74 years. They were taking more medications (average 9) and more falls related medications (average 3) than the cohort who had not fallen.

Conclusions: Given that up to 40% of falls are preventable¹, it is vital to identify and address further risk factors for falls, in this already at risk rheumatology patient cohort. The interventions provided in the inpatient rheumatology setting, such as medication review, physiotherapy and occupational therapy are vital for identification of those at higher risk and for prevention of falls going forward.

References:

1. Health Service Executive. Strategy to Prevent Falls and Fractures in Ireland's Ageing Population. June 2008.
2. American Geriatrics Society, British Geriatrics Society and American Academy of Orthopaedic Surgeons Panel on Falls Prevention. JAGS 2001; 49:664-672.

ABSTRACT 29 (15A139) POSTER PRESENTATION

The Development of a Nurse-Led brief intervention focusing on smoking in Rheumatoid Arthritis (RA) patients in the North Western Rheumatology Unit (NWRU)

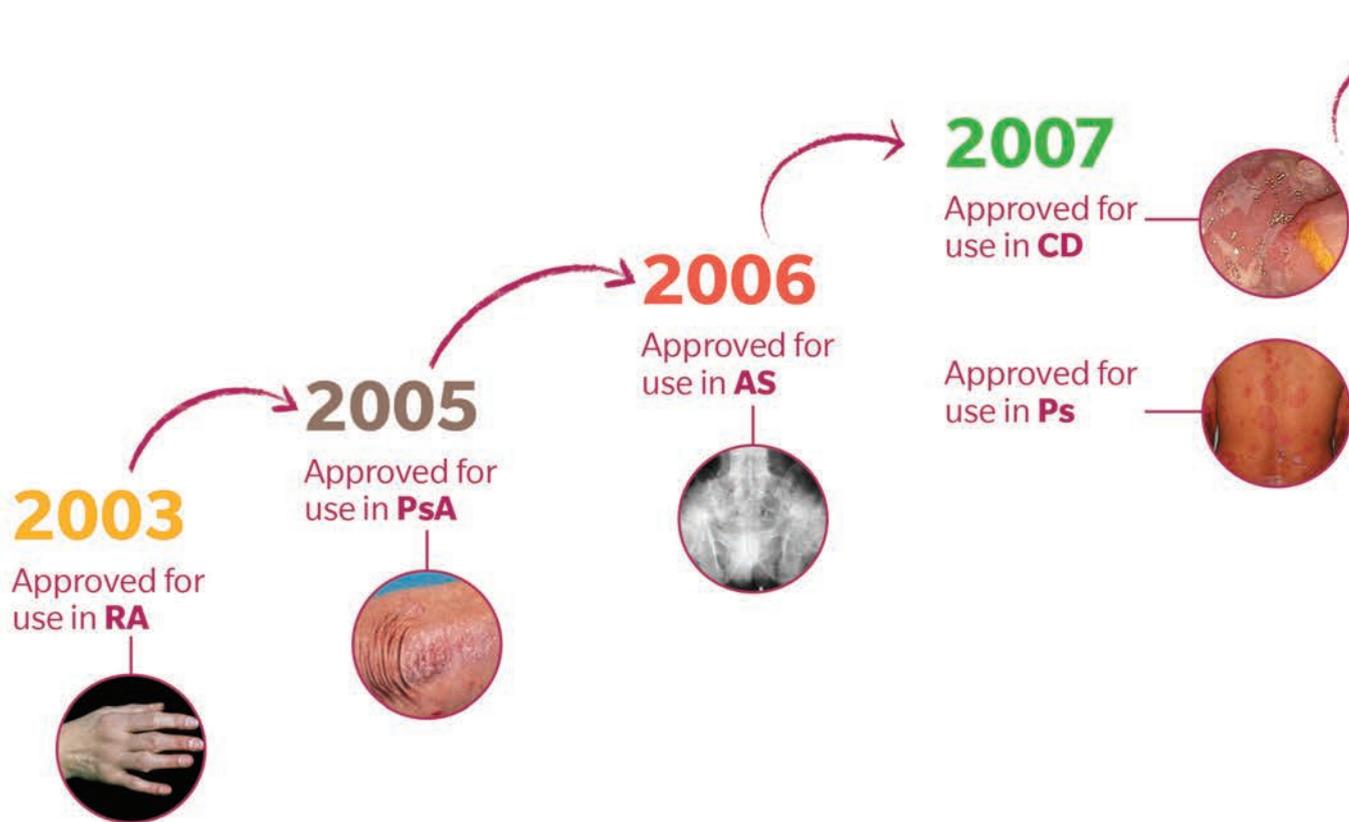
Author(s): Clodagh Duffy, Bernie Mc Gowan, Carmel Silke, Bryan Whelan.

Department(s)/Institution(s): Northwestern Rheumatology Unit, Our Ladys Hospital, Manorhamilton, Co. Leitrim

Introduction: To enable the rheumatology nurse specialist to raise awareness of the impact of smoking on RA and to introduce a brief intervention approach (HSE, 2011) in an effort to reduce smoking rates in patients with RA

Trust in HUMIRA

HUMIRA has 12 approved indications¹



Rheumatoid Arthritis (RA)

HUMIRA in combination with methotrexate, is indicated for:

- the treatment of moderate to severe, active rheumatoid arthritis in adult patients when the response to disease-modifying anti-rheumatic drugs including methotrexate has been inadequate.
- the treatment of severe, active and progressive rheumatoid arthritis in adults not previously treated with methotrexate.

HUMIRA can be given as monotherapy in case of intolerance to methotrexate or when continued treatment with methotrexate is inappropriate.

HUMIRA has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function, when given in combination with methotrexate.

Psoriatic Arthritis (PsA)

HUMIRA is indicated for the treatment of active and progressive psoriatic arthritis in adults when the response to previous disease-modifying anti-rheumatic drug therapy has been inadequate. HUMIRA has been shown to reduce the rate of progression of peripheral joint damage as measured by X-ray in patients with polyarticular symmetrical subtypes of the disease and to improve physical function.

Ankylosing Spondylitis (AS)

HUMIRA is indicated for the treatment of adults with severe active ankylosing spondylitis who have had an inadequate response to conventional therapy.

Crohn's Disease (CD)

HUMIRA is indicated for treatment of moderately to severely active Crohn's disease, in adult patients who have not responded despite a full and adequate course of therapy with a corticosteroid and/or an immunosuppressant; or who are intolerant to or have medical contraindications for such therapies.

Date of Preparation: August 2015 IREHUM140419a(2)



Psoriasis (Ps)

HUMIRA is indicated for the treatment of moderate to severe chronic plaque psoriasis in adult patients who failed to respond to or who have a contraindication to, or are intolerant to other systemic therapy including cyclosporine, methotrexate or PUVA.

Polyarticular juvenile idiopathic arthritis

HUMIRA in combination with methotrexate is indicated for the treatment of active polyarticular juvenile idiopathic arthritis, in patients from the age of 2 years who have had an inadequate response to one or more disease-modifying anti-rheumatic drugs (DMARDs). HUMIRA can be given as monotherapy in case of intolerance to methotrexate or when continued treatment with methotrexate is inappropriate. HUMIRA has not been studied in patients aged less than 2 years.

Paediatric Crohn's Disease (Paed CD)

HUMIRA is indicated for the treatment of severe active Crohn's disease in paediatric patients (from 6 years of age) who have had an inadequate response to conventional therapy including primary nutrition therapy, a corticosteroid, and an immunomodulator, or who are intolerant to or have contraindications for such therapies.

Hidradenitis Suppurativa (HS)

HUMIRA is indicated for the treatment of active moderate to severe hidradenitis suppurativa (acne inversa) in adult patients with an inadequate response to conventional systemic HS therapy.

Full prescribing information is available upon request from AbbVie Limited, Block B, Liffey Valley Office Campus, Quarryvale, Co Dublin, Ireland. **Legal category:** POM. **Marketing Authorisation Numbers:** EU/1/03/256/001-005, EU/1/03/256/007-010. **Marketing Authorisation Holder:** AbbVie Ltd., Maidenhead, Berkshire SL6 4UB, UK.

Reference: 1. HUMIRA [summary of product characteristics]. AbbVie Ltd.

Paediatric plaque psoriasis (Paed Ps)

Treatment of severe chronic plaque psoriasis in children and adolescents from 4 years of age with an inadequate response to or who are inappropriate candidates for topical therapy and phototherapies.

Ulcerative Colitis (UC)

HUMIRA is indicated for treatment of moderately to severely active ulcerative colitis in adult patients who have had an inadequate response to conventional therapy including corticosteroids and 6-mercaptopurine (6-MP) or azathioprine (AZA), or who are intolerant to or have medical contraindications for such therapies.

Axial Spondyloarthritis Without Radiographic Evidence of AS (nr-axSpA)

HUMIRA is indicated for the treatment of adults with severe axial spondyloarthritis without radiographic evidence of AS but with objective signs of inflammation by elevated CRP and / or MRI, who have had an inadequate response to, or are intolerant to nonsteroidal anti-inflammatory drugs.

Enthesitis-related Arthritis (ERA)

HUMIRA is indicated for the treatment of active enthesitis-related arthritis in patients, 6 years of age and older, who have had an inadequate response to, or who are intolerant of, conventional therapy.

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Method: A database of 29 newly diagnosed patients with RA attending the NWRU between Sept and November 2014 was analysed to identify the percentage of smokers and non-smokers. The brief intervention is a short session of 5 to 10 minutes duration which is used to address unhealthy habits in patients. It uses the principles of motivational approach to enhance client centred practise. It is an evidence based framework to up skill health care workers in brief intervention and guidance practice. It is a validated tool for attaining smoking cessation. It is proposed that the clinical nurse specialists will attend the specific training program on smoking cessation provided by the health promotion department of the HSE, prior to implementing this intervention.

Results: The results of the analyses of the database of 29 newly diagnosed RA patients attending NWRU between Sept and Nov identified that 28% of the patients were smokers

Conclusions: There is no specific information leaflet available to educate the patients on the facts of smoking and RA at present. Customised leaflets, documenting smoking status, delivering brief advice, the referral of patients to smoking cessation clinics and auditing outcomes, will all be part of this nurse-led brief intervention to address the issue of smoking in patients with RA.

ABSTRACT 30 (15A141) POSTER PRESENTATION

How ultrasound guided synovial biopsies can help in clinical practice?

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²Histopathology, CHU Nantes, NANTES, France

³Rheumatology, Saint Vincent's Hospital, Dublin, Ireland

Introduction: Histological and bacteriological analysis of synovial tissue can be useful in the diagnosis of arthritis of undetermined origin. Ultrasound (US) can assist this biopsy in directing the needle within the joint as well as allowing an evaluation of synovial inflammation and thickness.

Aims/Background: The aims of this study were to describe the indications for US guided synovial biopsies in clinical practice, to determine the rate of success in acquiring synovial tissue using this approach and to determine how frequently the synovial biopsy can lead to a definite diagnosis.

Method: The aims of this study were to describe the indications for US guided synovial biopsies in clinical practice, to determine the rate of success in acquiring synovial tissue using this approach and to determine how frequently the synovial biopsy can lead to a definite diagnosis.

Results: Seventy-three patients underwent 75 ultrasound guided biopsy procedures. Fifty-three per cents were men and average age was 57,9 years (+/- 17,2). Biopsies were performed in the following joints: 42 knees, 7 wrists, 6 ankles, 6 hips, 3 shoulders, 3 sterno-clavicular joints, 3 elbows, 2 metatarsophalangeal joints, 1 pubic symphysis, 1 acromio-clavicular joint and 1 fibular tenosynovitis. Patients presented a chronic (>3 months)

monoarthritis in 42 cases (56%), an acute monoarthritis in 18 cases (24%), a chronic polyarthritis in 13 cases (18%), an acute polyarthritis, a chronic tenosynovitis in 1 case respectively. US guided biopsy attempt succeeded in 85% of cases (64 on 75 biopsies performed). There was no difference on success rate between small and large joints. Ten of the 64 biopsies (16% of patients) led to a definitive diagnosis (2 septic arthritis, 2 villonodular synovitis, 1 amyloid arthritis, 1 joint localization of a mantle cell lymphoma, 1 gouty arthritis, 1 osteochondromatosis, 1 Whipple disease (positive PCR on synovial tissue, with negative PCR on synovial fluid) and 1 Lyme arthritis. One patient presented a knee hemarthrosis 48 hours after the US guided biopsy.

Conclusions: Ultrasound guided synovial biopsies in clinical practice are performed on patients with heterogeneous features. Success rate in acquiring synovial tissue is high. The procedure leads to a definite diagnosis in more than 1 on 6 patients with arthritis of undetermined origin.

ABSTRACT 31 (15A143) POSTER PRESENTATION

The role of the Rheumatology nurse in improving compliance with exercise plans in patients with Ankylosing Spondylitis

Author(s): Maria Lynch, Bernie McGowan, Bryan Whelan, Carmel Silke

Department(s)/Institution(s): North West Rheumatology Unit, Our Lady's Hospital, Manorhamilton, Co. Leitrim

Introduction: Ankylosing Spondylitis (AS) is a form of chronic inflammatory arthritis characterised by sacroiliitis, spinal and peripheral enthesitis. It frequently features a propensity for sacroiliac joints and spinal fusion (Braun and Sieper, 2007). Maintenance and improvement of flexibility have been pinpointed as the focal point of exercise programmes in reviews of clinical trials investigating physiotherapy interventions for the AS patient (Dagfinrud et al., 2011).

Aims/Background: In the absence of on-site physiotherapists at clinics, the Rheumatology nurse during her assessment, education and management of the patient with AS is ideally placed to include an assessment of the patients' physical activity levels, measures of flexibility and adherence to tailored exercise programs.

Method: A sample of 22 patients from the North West Rheumatology region with a diagnosis of AS, were reviewed and their personal reports of exercise habits were analysed. Each patient was questioned on their exercise patterns and grouped into 4 main groups. Along with the patients' physical activity levels, their Bath Ankylosing Spondylitis Functional Index (BASFI) score for levels of exercise is also recorded.

Results: The results of the survey of 22 patients attending the NWRU with a diagnosis of AS identified that only 13% of the patients were exercising on a weekly basis. The results showed that of the 22 patients (mean age 51yrs) with a diagnosis of AS presently attending the NWRU identified that in total 12(55%) of the AS patients were performing little or no exercise prior to their clinic



Conclusions: In the NWRU and in many of the rheumatology units across the country due to limited resources patients with a diagnosis of AS do not have direct access to the physiotherapist unless they arrange same on a private basis therefore the CNS as “a gatekeeper” must advocate exercise as a vital component in the effective long-term management of AS. By increasing confidence and skills in exercise, patients can be empowered to take control of their overall health.

References: Braun J, Sieper J. (2007) ‘Ankylosing spondylitis’. *Lancet*, 369:1379-90

Dagfinrud H, Halvorsen S, Vollestad NK, et al. (2011). ‘Exercise programs in trials for patients with ankylosing spondylitis: do they really have the potential for effectiveness?’ *Arthritis Care Res (Hoboken)*.;63:597–603

ABSTRACT 32 (15A144) POSTER PRESENTATION

Fracture Risk Assessment of Patients with Inflammatory Joint Disease Receiving Biological Agents Attending A Rheumatology Service in a University Affiliated Teaching Hospital

Author(s): Órla McDonnell¹, Mortimer B. O’Connor², Ursula Bond², Mark J. Phelan²

Department(s)/Institution(s): ¹The School of Medicine, University College Cork, Cork, Ireland

²Department of Rheumatology, South Infirmary Victoria University Hospital, Cork, Ireland

Introduction: Osteoporosis, characterised by deteriorating bone microarchitecture with a concomitant increase in bone fragility, represents a growing public health concern. From an inflammatory arthropathy perspective, especially RA, it is a well-known extra-articular characteristic of concern. Fracture risk can be examined using the World Health Organization Fracture Risk Assessment Tool (FRAX®) which has been formulated to estimate a 10-year absolute risk of fracture using validated clinical risk factors.

Aims/Background: The aims of our study were to determine the fracture risk in patients receiving biologic therapies using the FRAX® tool and to determine if a care-gap exists in this cohort.

Method: A cross-sectional telephone based questionnaire study, employing the FRAX® tool, was conducted on Inflammatory arthropathy patients (RA, PsA, SNA, AS), receiving biological therapies, attending our Rheumatology service. Patients received a letter informing them of the study and pending telephone call one week in advance. Those not contactable within two attempted telephone calls were excluded from the study. Patients were randomly selected from the Departments Biologics database. Following FRAX® assessment, patients were classified as low, intermediate or high fracture risk using The National Osteoporosis Guideline Group (NOGG) analysis.

Results: 182 patients were telephoned with 123 patients being contactable within two attempts. 101 patients partook in the study. 8 (8%) had a prior osteoporosis diagnosis. 93 (92%) were eligible for FRAX® assessment with a mean age was 55.5 years (range: 40-75) and 53% male. Of the untreated group 77% had RA, 14% PsA and 8% AS. FRAX® assessment gave a median 10-year hip osteoporotic fracture probability of 2.1% (mean =

3.5%) and major osteoporotic fracture probability of 11% (mean = 12.4%). NOGG analysis would advise offering treatment to 25%, DXA imaging to 56% and osteoporosis/fracture risk lifestyle advice to 19% of patients. Thus a potential 81% of untreated patients may require osteoporosis/risk fracture prevention measures.

Conclusions: A large care-gap was identified among this patient group. Results highlight the need to identify and modify fracture risk in patients with inflammatory arthropathies receiving biologic therapies.

ABSTRACT 33 (15A145) POSTER PRESENTATION

Osteoporosis management following teriparatide therapy for vertebral fractures: Are patients on correct maintenance therapy?

Author(s): Daniel Gilmartin, Mortimer B. O’Connor, Siobhan Scanlon, Ursula Bond, Mark J. Phelan

Department(s)/Institution(s): The Department of Rheumatology, South Infirmary Victoria University Hospital, Cork, Ireland

Introduction: Teriparatide is used as a daily subcutaneous therapy for severely osteoporotic patients, with therapy duration of 18 to 24 months. It functions as an anabolic agent, and demonstrates increases in cortical thickness and reduces fracture risk. For the benefits of teriparatide to be sustained anti-reabsorptive therapy, in combination with calcium/vitamin D supplementation, should be initiated/restarted long-term after teriparatide therapy.

Aims/Background: The aim of this study are to assess patients medication history following teriparatide therapy completion.

Method: All patients prescribed teriparatide therapy from 2009 to 2012 were identified from departmental prescription records. Contact information was identified from local hospital databases. Patients were sent a pre-study letter outlining the nature of the study and the questions. This was followed by a telephone call, within two weeks, from the investigators. Three telephone attempts were made to contact participants after which they were excluded from the study. Participants were asked to list their current medications, background diagnoses and if they sustained a fracture since completing teriparatide therapy.

Results: 113 patients were identified from records. 42 were contacted and consented to participate in the study, 16 were deceased and 55 were uncontactable despite three attempts. Of the 42 enrolled, 45.2% (n=19) were no longer on a calcium or vitamin D supplementation and 57.1% (n=24) were no longer on an anti-reabsorptive, despite it being prescribed at their post-teriparatide Rheumatology assessment prior to discharge to GP care.

Conclusions: Despite being prescribed an anti-reabsorptive osteoporosis medication and calcium/Vitamin D supplementation on completion of teriparatide therapy there was a significant number of patients who no longer took these medications. The reasons for discontinuation are undocumented. This leaves them exposed to a submaximal benefit from therapy and an increased future fracture risk. This care-gap needs to be tackled.



ABSTRACT 34 (15A146) POSTER PRESENTATION

Burden of ultrasonographic enthesitis in Psoriatic arthritis patients in DAS28 remission

Author(s): A Mumtaz, A Saeed, R Mullan, D Kane

Department(s)/Institution(s): Department of Rheumatology, Adelaide and Meath Hospital, Tallaght, Dublin

Introduction: Ultrasound (US) has been shown to be more sensitive and specific than clinical examination in the diagnosis of enthesitis in early Psoriasis and Psoriatic arthritis (PsA).(1)

Aims/Background: To determine ultrasonographic burden of enthesitis in Psoriatic arthritis (PsA) patients in DAS 28 remission (DAS

Method: A prospective cohort of 42 PsA patients who satisfied the CASPAR criteria and were in DAS 28 remission was recruited.

For calculation of the GUESS score, Quadriceps Tendon Insertion (QTI), Patellar Ligament Origin (PLO), Patellar Ligament Insertion (PLI), the Achilles tendon Insertion (AI), and the plantar Aponeurosis (PA) were examined in both lower limbs of each patient.(2) Power Doppler(PD) US examination was undertaken by using a MyLab 70 XVG (Esaote SpA, Genoa, Italy) using broadband frequency transducer ranging from 6 to 18MHz and Doppler frequency ranging from 5.9 to 14.3MHz according to the target. Standardised PD settings were used with pulse repetition frequency (PRF) = 750 Hz, wall filter = 3 and Doppler frequency from 5.9 to 9.1MHz for entheses.

Results: At the level of QTI, enthesophytes were present in 16 (38%), bursitis in 3 (7.14%) and PD was noted in 7 (16.6%) patients. At the level of PLO, enthesophytes were noted in 5 (11.9%), bursitis and PD signal was noted in 3 patients (7.14%). At AI, enthesophytes were noted in 17, bursitis in 2 and PD signal was noted in 3 patients. At the level of PA, enthesophytes were noted in 7(16.6%), PD in 4 (9.1%), bursitis in 1 patient. At PA, one site had evidence of erosion and enthesophyte. The median GUESS score of the cohort was 5. Spearman rank correlation coefficient was used to demonstrate no correlation of the GUESS with either patient or physician global disease activity assessments nor with joint or skin assessment.

Conclusions: There is significant burden of clinically undetected psoriatic disease activity at the enthesal level in patients deemed to be in DAS remission. It is independent of the burden of the skin and joint disease.

Statistics

| | AI | PLO | PLI | QTI | PA | CPDAI | GUESS |
|----------------|-------|-------|------|-------|-----|-------|-------|
| Mean | 4.859 | 3.803 | 4.9 | 5.697 | 3.9 | 1.42 | 5.14 |
| Median | 4.7 | 3.7 | 5.1 | 5.7 | 3.7 | 1 | 5 |
| Std. Deviation | 0.869 | 0.523 | 0.77 | 0.818 | 0.8 | 1.057 | 3.079 |
| Range | 4.8 | 2.2 | 3.5 | 4.4 | 3 | 4 | 12 |
| Minimum | 3.6 | 3 | 3 | 4.4 | 3 | 4 | 0 |
| Maximum | 8.4 | 5.2 | 6.5 | 8.8 | 6 | 4 | 12 |

References: 1. Gisoni P, Tinazzi I, El-Dalati G, Gallo M, Biasi

D, Barbara LM, et al. Lower limb enthesopathy in patients with psoriasis without clinical signs of arthropathy: a hospital-based case-control study. *Ann Rheum Dis.* 2008 Jan;67(1):26-30.
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ABSTRACT 35 (15A150) POSTER PRESENTATION

Anti CCP a diagnostic and Prognostic marker for Rheumatoid Arthritis

Author(s): Khan S, Oyedotun L, Janjoa F, Maheshwaran S, Sheehy C

Department(s)/Institution(s): Rheumatology Department, University Hospital Waterford (UHW)

Introduction: The main bio markers for Rheumatoid Arthritis are Rheumatoid factor (RF), and Anti Cyclic Citrullinated Peptides (CCP). They are used for diagnosis, as well as prognosis.

Aims/Background: The presence and high titre of the two antibodies is associated with poor prognosis; smoking further increases the risk of adverse outcome, nearly 20 times more than in non smokers.

Method: A retrospective Audit. 240 anti CCP levels were sent in 2014

207 patients had clinical letters available for evaluation. Parameters included were.

- Year of diagnosis
- Whether Anti CCP was checked at the time of diagnosis
- RF checked / not
- RF, positive or negative
- Anti CCP , positive or negative
- Anti CCP titre
- Rituximab treatment
- Smoking status

Results: Anti CCP testing only became available in UHW in late 2013 and was restricted to rheumatology service only. These patients were diagnosed with inflammatory or Rheumatoid Arthritis between 1975 and 2014.

- 88.4% had RF checked, and 51 % were positive
- The titre for Anti CCP ranged from 0.12 _ >340.
- 6.6 % received Rituximab.
- 28% patients' smoking status was recorded, 6.6 % were active smoker, 3.1 % ex smoker, and 20.4% non smokers.
- 29.9% of Anti CCP samples were positive.
- 50.2% of samples were sent at the time of initial presentation
- 3 RF negative patients were treated with RTX on the basis of anti CCP positivity
- 30 patients were Anti CCP positive, though they were RF negative

Conclusions: The availability of anti CCP testing added information regarding diagnosis, prognosis and management of patients with RA

References: QJM. 2007 Apr;100(4):193-201



ABSTRACT 36 (15A152) POSTER PRESENTATION

Metabolic Reprogramming in the Inflamed Joint Inhibits Pro-Inflammatory Mechanisms

Author(s): M. Biniecka, Canavan M, Gao W, Ng CT, Cregan S, Smith T, McGarry T, Veale DJ, Fearon U

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, St. Vincent's University Hospital, Dublin, Ireland

Introduction: Hypoxia is a powerful trigger of synovial cell activation, proliferation and survival. Metabolic turnover of the inflamed synovium outpaces a dysfunctional vascular supply which may induce a cellular metabolic switch towards glycolysis.

Aims/Background: To examine the relationship between synovial hypoxia, cellular bioenergetics and mitochondrial dysfunction with inflammation.

Method: Primary RASFCs were cultured with hypoxia, DMOG or lactic acid. Mitochondrial respiration (reactive oxygen species [ROS], mitochondrial membrane potential [MMP], mitochondrial mass [MM]), mitochondrial genome mutations and morphology, along with cell invasion, pro-inflammatory cytokines, glucose and lactate were assessed using specific functional assays and TEM. RASFC metabolism was assessed by the XF24 Flux analyser (Seahorse), which simultaneously quantifies real-time measurements of aerobic (Oxygen Consumption Rate) and anaerobic (Extracellular Acidification) bioenergetic profiles. In vivo synovial tissue glycolysis and oxidative phosphorylation (GAPDH, PKM2, GLUT1, ATP), inflammation and angiogenesis were quantified by immunohistology in synovial tissue (ST) from 44 patients with active inflammatory arthritis and paired ST oxygen (tpO₂) measurements measured at arthroscopy. Finally the effect of blocking glycolysis using a small molecule 3PO on RASFCs and endothelial cell (EC) migration, angiogenesis, pro-inflammatory cytokines and transcriptional regulation of HIF1 α , pSTAT3 and Notch signalling was examined.

Results: In RASFC, hypoxia increased mitochondrial mutations, MM, MMP, ROS and invasion but inhibited ATP indicating altered cellular energy metabolism (all p

Conclusions: Hypoxia alters cellular bioenergetics by down-regulating mitochondrial respiration and promoting a switch to glycolysis in the inflamed joint. This enables synovial cells to generate sufficient ATP to support abnormal angiogenesis, immune responses, cellular invasion and pannus formation.

ABSTRACT 37 (15A153) POSTER PRESENTATION

Monitoring for Methotrexate Toxicity

Author(s): McCarthy N, Mongey AB

Department(s)/Institution(s): Department of Rheumatology, St Vincent's University Hospital

Introduction: Methotrexate is used for a variety of inflammatory conditions, and is associated with the risk of

adverse effects.

Aims/Background: The study aims were to assess patient knowledge of, and adherence to blood monitoring standards in those being treated with methotrexate in the Rheumatology Department at SVUH.

Method: Patients attending rheumatology clinics were interviewed using a standard proforma. Information including demographics, methotrexate dosage, mode of administration, duration of treatment, frequency and location of monitoring, and patient awareness and understanding of the importance of monitoring were obtained.

Results: Forty patients were recruited, 12 (30%) male and 28 (70%) female. Mean age was 63.5 years, and the age range was 30-90 years. Duration of treatment ranged from 3 months to >20 years. Mean dose was 16.9mg, dose range was 7.5-25mg, and median dose was 20mg weekly. Nine (22.5%) patients were on injectable methotrexate.

Twelve patients (30%) were having blood tests less frequently than recommended guidelines (at an interval of no less than 3 monthly when dosage is stable)(1), with 9 patients (22%) undergoing monitoring at an interval of 6 monthly or less frequently.

Thirty-eight (95%) were aware of the necessity for monitoring; the 2 (5%) who were unaware were still in compliance with the recommended guidelines. Nine (22.5%) were unaware of the reasons for monitoring; however of those, 7 were still compliant with monitoring guidelines.

Thirty-five patients were attending either their GP (16) or SVUH (19) for monitoring, of these 5/16 (31%) and 7/19 (36.8%) were noncompliant, respectively. Patients receiving methotrexate for >5 years had compliance rates of 15/21 (71%), in comparison to

Conclusions: In conclusion, 30% of the patients receiving methotrexate, attending SVUH rheumatology clinics were not compliant with recommended monitoring standards. There was no association between lack of compliance with monitoring and patient awareness of the need and reason for monitoring; location of monitoring; duration of treatment or mode of administration of methotrexate.

It is recommended that physicians reinforce the importance of monitoring with patients at clinic appointments.

Reference: (1) SVUH/PH Guidelines for Blood Monitoring of DMARD, Department of Rheumatology, revised 2013

ABSTRACT 38 (15A155) POSTER PRESENTATION

The role of epigenetics in determining the clinical response to Methotrexate for the treatment of Rheumatoid Arthritis

Author(s): Cregan S, Creevey K, McGarry T, Orr C, Veale DJ, Fearon U, Wilson AG

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland

Introduction: Rheumatoid Arthritis (RA) is a chronic inflammatory autoimmune disease, affecting around 1% of the population, causing significant ill health, disability and increased



mortality. The precise etiology of RA is not known, but both genetic and environmental influences play a role. Methotrexate (MTX) is the most commonly used disease modifying anti-rheumatic drug in the management of RA, however its mechanism of action has not been extensively studied.

Method: Primary RA synovial fibroblasts (RASFC) were isolated from synovial biopsies obtained from patients undergoing arthroscopic examination. RASFC were cultured in the presence or absence of MTX (10-100uM) for 48 hrs and cell migration, invasion, cytoskeletal rearrangement, viability, proliferation and pro-inflammatory cytokine expression were assessed by wound repair assays, transwell matrigel™ invasion chambers, F-actin immunofluorescent staining, MTT/ Crystal violet cell growth assay and ELISA respectively. In parallel, CD14+ monocytes were isolated from peripheral blood mononuclear cells from RA patients both pre- and 12 weeks post-MTX therapy and global methylation was assessed.

Results: MTX (10-100uM) inhibited RASFC repopulation of the wound margins in comparison to vehicle control where migration across the wound was clearly evident (n=7, p=0.03). In parallel, MTX significantly decreased RASFC invasion (n=7, p=0.01) and altered cytoskeletal dynamics through inhibition of lamellopodia and filopodia formation, which are indicative of cell movement. Importantly, we determined that the effect of MTX on RASFC migration and invasion were independent of both cell viability (p=0.37) and proliferation (p=0.18). Finally preliminary results demonstrated altered DNA methylation in CD14+ monocytes from RA patients (n=11) at 3 months post MTX treatment.

Conclusions: MTX inhibits RASFC migration, invasion and cytoskeletal re-arrangement, mechanisms which are critically involved in the pathogenesis of RA. Further preliminary data suggests that the effect of MTX on pro-inflammatory mechanisms in RA, maybe be mediated through alterations in epigenome.

ABSTRACT 39 (15A156) POSTER PRESENTATION

Disease Stratification by ACPA in RA According to Biological Features of Synovium

Author(s): Orr C, McGarry T, Ng CT, Creevey K, McCormick J, Young F, Fearon U, Veale DJ.

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland

Introduction: The first order of RA stratification is now understood to be ACPA positive (+) and ACPA negative (-) disease, and it is known that each have distinct characteristics. Despite a worse prognosis overall, patients positive for ACPA have been shown to have better responses to therapy, in particular to rituximab, supporting the hypothesis that B-cells play a more significant role in the ACPA positive disease.[1] Despite these well reported differences in clinical disease expression, little has been reported on the differences at the principal target of aberrant inflammation, the synovium, between these two important disease phenotypes at a macroscopic, cellular, and cytokine level.

Aims/Background: To study the synovium of patients with the two RA phenotypes, examining:

1. Macroscopic scores of synovitis and vascularity at knee arthroscopy
2. Histology inflammatory scores and immunohistochemistry of synovial tissue
3. Synovial fluid cytokine analysis
4. Response of explant biopsies to adalimumab

Method: Patients with active RA were recruited to undergo knee arthroscopy, where the operator recorded separately a macroscopic score of synovitis and vascularity, graded at 5 unit intervals between 0-100. Biopsies were taken and stained for various markers. Where synovial fluid was retrieved at arthroscopy, levels of various cytokines were measured. The Mann-Whitney test was employed to determine differences in each parameter between those positive and negative for ACPA.

Results: Patients positive for ACPA had lower macroscopic vascularity scores and lower synovitis scores (p≤0.02) but higher serum CRP levels at the time of arthroscopy. ACPA+ patients had higher histological scores of inflammation (p≤0.01) as well as more CD3 (p≤0.01) and CD8 (p≤0.03) expression in the sublining layer, with no significant differences in other markers. The synovial fluid of ACPA+ patients demonstrated higher levels of the cytokines INFγ (p≤0.01) and IL1β (p≤0.04) when compared to that of ACPA- patients. Finally, IL6 and IL8 levels in the supernatants of explant biopsies of ACPA+ patients were significantly suppressed by TNFi after 72hours incubation (p≤0.0002 and p≤0.0001 respectively), but this was not seen in biopsies from ACPA- patients.

Conclusions: ACPA differentiates between two clear RA phenotypes. Analysis of immunophenotype and molecular biomarkers is now underway.

Reference:

1. Willemze A, Trouw LA, Toes RE, Huizinga TW. The influence of ACPA status and characteristics on the course of RA. *Nat Rev Rheumatol* 8(3), 144-152 (2012).

ABSTRACT 40 (15A157) POSTER PRESENTATION

The Relationship of Arthroscopic Findings in RA to Histology, Radiographs and serum C-Reactive Protein levels

Author(s): Orr C, McGarry T, Young F, Fearon U, Veale DJ.

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland.

Introduction: The utility of synovial biopsy has been confirmed in increasing our understanding of the pathogenesis of RA, evaluating new treatments and identifying potential therapeutic targets.[1, 2] However, no scoring system for the assessment of synovitis at knee arthroscopy has been validated against the histological grade of inflammation observed in the synovial biopsies retrieved.

Furthermore, the power that arthroscopy may have in identifying patients with active inflammation despite normal CRPs has not been reported. Finally, we currently understand only 32% of the variance in factors that predict joint destruction,[3] and



macroscopic findings at arthroscopy may present an additional opportunity in assessing those most at risk of this disease course.

Aims/Background: To validate synovitis scores at arthroscopy with histology scores, CRP levels and erosive disease on radiographs.

Method: 141 patients with RA were recruited to undergo arthroscopy, and serum CRP levels were measured at the same time. The most recent set of hands and feet radiographs were assessed for the presence or absence of erosions. A macroscopic score of synovitis, graded at 5 unit intervals between 0-100, was recorded by the operator at each arthroscopy. Synovitis scores were analysed using Pearson's test for correlation, with categorical data for histology findings (no inflammation, mild inflammation, and moderate-severe inflammation). The same test was used to determine if there was a correlation between synovitis scores and CRP levels. The Chi-square test was employed to test for a relationship between categorical synovitis scores (4 quartiles), and the presence or absence of erosions.

Results: A correlation was observed between synovitis scores and histology findings ($p \leq 0.002$, $r = 0.3$).

There was no correlation with synovitis scores and CRP levels. 49 (34.8%) patients had normal CRP levels (0-5mg/l), with 29 (59.2%) having synovitis scores $>50\%$. An association was also observed with higher synovitis scores and the presence of erosions ($p \leq 0.02$).

Conclusions: Synovitis can be reliably assessed by scores at arthroscopy, which correlating with histology. Arthroscopy has the power to identify patients with synovitis, where CRP levels are normal, favouring the concept that not all RA phenotypes manifest elevated CRP levels during active disease. Furthermore, those with high synovitis scores are more likely to have erosions.

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3. De Rooy DP, Van Der Linden MP, Knevel R, Huizinga TW, Van Der Helm-Van Mil AH. Predicting arthritis outcomes—what can be learned from the leiden early arthritis clinic? *Rheumatology (Oxford, England)* 50(1), 93-100 (2011).

ABSTRACT 41 (15A158) POSTER PRESENTATION

Repeating Serology Testing in RA: Are We Adopting a Rational Approach?

Author(s): Orr C, Young F, Veale DJ.

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland.

Introduction: There is an absence of literature on the merits or problems of repeat serology testing in patients with RA. The auto-antibodies RF and anti-CCP have significance far outweighing assistance in diagnosis, clearly having prognostic relevance, and in some cases predicting response to specific therapies.(1,2) A complete phenotype of a patient's disease is only clear when both these sets of antibodies are known.

There are indications from other specialities that serology testing is often repeated in as much as 15% of the time.(3) Repeated testing is often unnecessary and expensive, but it is unclear to what extent this is a problem in RA.

Aims/Background: To determine how often serology is repeated in an RA cohort and to determine how often repeat testing of RF yields a different result.

Method: We analysed how many times each patient in a cohort comprising consecutive patients attending clinic in July 2014 had been tested for each auto-antibody. Equivocal results were excluded, leaving only clear positive and negative results. We examined separately how many times an initial positive RF was retested, and how often the first (index) RF result changed.

Results: 100 patients were included. 73 (73%) had RF tested more than once. 29 (29%) had RF tested 4 times or more. 64 (64%) were positive for RF at index testing. Of these patients, 50 (78.1%) had RF tested more than once and 22 (34.4%) had RF tested 4 times or more. 1 positive RF at index measured negative but positive again on third testing. 1 negative RF at index became positive at second testing.

Anti-CCP status was known for 85 patients. 21 (24.7%) were tested more than once, and 4 (4.7%) were tested 4 times or more. 59 (69.4%) were positive for anti-CCP at index testing. Of these patients, 11 (18.6%) had anti-CCP tested more than once and 1 (1.7%) were tested 4 times or more.

Conclusions: Patients who have clearly tested positive for RF or anti-CCP should not be retested routinely but this study does not change the merits of repeat testing in equivocal cases. Inappropriate repeat testing of RF is common and the results only rarely change.(4) There is evidence that automated alerts from the laboratory identifying repeat test requests can reduce this burden on laboratory services(3), and educating the source of the requests (e.g. primary care physicians), regarding the utility of the test might also reduce the burden.

References: 1. Gardette A, et al. High anti-CCP antibody titres predict good response to rituximab in patients with active rheumatoid arthritis. *Joint Bone Spine*. 2014;81(5):416-20.

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ABSTRACT 42 (15A159) POSTER PRESENTATION

Radiologist versus Rheumatologist: Interpretation of Erosive Change on Plain Film Radiographs in RA

Author(s): Orr C, Najm A, Young F, Veale DJ

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre, University College Dublin, Ireland.

Introduction: RA is characterised by progressive changes in bone architecture characterised primarily by the development of erosions, which later lead to deformity and disability[1] Identifying and monitoring erosive changes on plain film radiographs in patients with RA remains the ‘gold-standard’ in assessing disease progression over time.[2] Rheumatologists often use the radiologist’s reports in diagnosis and follow up of RA patients. How these reports in routine clinical practice compare with the formal assessment of radiographs using the validated Sharp/van der Heijde scoring (SHS) methods by rheumatologists[3] have not previously been reported.

Aims/Background: To determine the agreement between radiologist report and rheumatologist SHS of plain film radiographs for the presence or absence of erosions.

Method: 54 sets of hands and feet radiographs of patients with RA were scored by two rheumatologists separately. Following this, the reports of the radiologists were examined to determine if there was erosive disease. The erosion component of the SHS amounts to a maximum of 280 points, and erosions were considered present if the score was >5.

Results: The results are outlined in Table 1. Agreement between the radiologists and rheumatologists regarding bone erosions was achieved in 37 sets of radiographs (68.5%), with no instances of radiologists reporting erosions that were not identified by the rheumatologists.

Table 1.

| | Radiologist | Rheumatologist | Total |
|-------------------------|-------------|----------------|------------|
| Erosions Present | 25 | 42 | 67 |
| Erosions Absent | 29 | 12 | 41 |
| Total | 54 | 54 | 108 |

Conclusions: Nearly 70% of radiographs were agreed on. There were no radiographs judged to have erosions by radiology, but not by rheumatology, indicating that rheumatologists applying the SHS are more sensitive to identifying erosions. It is also worth noting that the mean score for the presence of erosions identified by rheumatologists but not radiologists was 13.71 (Std. Dev 6.28). Of a total erosion score of 280, this is very small. Furthermore, the clinical relevance of erosive scores this low is not clear. Smolen et al have shown that an increase in Sharp Score of a single point is approximately the equivalent of a change in HAQ score of 0.01.[4] A change in HAQ score of 0.19-0.23 is required before a change in function is observed[5] and this means that an increase of 19-23 points are expected to be necessary before this would have a clinically meaningful effect.

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2. Van Der Heijde DM. Radiographic imaging: The ‘gold standard’ for assessment of disease progression in rheumatoid arthritis. *Rheumatology (Oxford, England)* 39 Suppl 1, 9-16 (2000).
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ABSTRACT 43 (15A160) POSTER PRESENTATION

The Pro-angiogenic Mechanisms of MiR-125a-5p in Inflammatory Arthritis

Author(s): Sarah Wade, Mary Connolly, Douglas Veale, Ursula Fearon

Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, St. Vincent’s University Hospital, Dublin, Ireland

Introduction: MicroRNA belong to a class of small, evolutionarily conserved, noncoding RNAs that function as post-transcriptional repressors of gene expression. An accumulating body of evidence suggests that up to 50% of the human genome is regulated by miRNAs. The aim of this study was to examine expression, regulation and function of miRNA-125a-5p in inflammatory arthritis.

Method: Synovial tissue biopsies and primary synovial fibroblasts were obtained from patients with Psoriatic arthritis (PsA), Rheumatoid Arthritis (RA) and osteoarthritis (OA). MiR-125a-5p levels were analyzed by real-time PCR and data was calculated by the deltaCt method using RNU6B as an endogenous control. To examine possible factors involved in regulating miR-125a-5p expression, primary synovial fibroblasts and microvascular endothelial cells (HMVEC) were cultured with candidate pro-inflammatory stimuli including; TLR ligands (PAM, PolyIC, LPS), pro-inflammatory cytokines (TNF- α , IL-1 β , IL-17) and growth factors (VEGF, Ang2). Overexpression/silencing of miR-125a-5p was analysed using a synthetic precursor of Pre or Anti-miRTM-125, respectively. Cell invasion, tube formation and migration were examined using transwell invasion, angiogenic and wound repair assays, and pro-inflammatory mediators were quantified by ELISA.

Results: Expression of miR-125a-5p was significantly higher in PsA and RA synovial biopsies and/or synovial fibroblasts compared to OA (p<0.05; p<0.05), with highest expression observed in PsA (p<0.05). Angiogenic growth factor Ang2 induced miR-125a-5p in synovial fibroblasts and HMVEC (p<0.05), with no effect observed for TLR ligands or pro-inflammatory cytokines. Silencing of miR by transfection with anti-miR-125a-5p resulted in inhibition of cell invasion, angiogenic tube formation and IL-6 expression. This is



consistent with in silico analysis where prediction algorithms identified members of the IL-6 signalling pathway (IL-6R, gp130) as potential targets of miR-125a-5p.

Conclusions: Our data provides evidence that miR-125a-5p is significantly increased in the inflamed joint, particularly in PsA. High miR-125a-5p expression in PsA and regulation by key angiogenic factor Ang2, is consistent with a possible role for miR-125a-5p in the regulation of angiogenic mechanisms. MiR-125a-5p also mediated cell migration, angiogenesis and IL-6 expression, key processes involved in the pathogenesis of PsA and RA. In conclusion, miR-125a-5p may be an important regulator of pathogenic mechanisms in inflammatory arthritis and may represent a potential novel target for future therapeutic strategies.

ABSTRACT 44 (15A161) POSTER PRESENTATION

Down-Regulation of MiR-23a in Psoriatic Arthritis. Implications for Disease Pathogenesis

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Department(s)/Institution(s): Centre for Arthritis and Rheumatic Diseases, Dublin Academic Medical Centre University College Dublin, Ireland

Introduction: Psoriatic Arthritis (PsA) is a chronic immune-mediated inflammatory disease, characterised by proliferation of synovial tissue and progressive destruction of articular cartilage/bone, associated with psoriasis. These processes may be governed by microRNA (miRNA), a class of small non-coding RNAs which exert their function through suppression of specific target genes. Altered miR-23a expression has been previously associated with invasion, migration and pro-inflammatory mechanisms in other diseases. However, altered miRNA expression and its pathogenic implications have not been examined in PsA.

Method: Synovial tissue biopsies and peripheral blood mononuclear cells (PBMC) from PsA (n=8), osteoarthritis (OA) (n=7), and healthy controls (n=8). To examine possible factors involved in regulating miR-23a expression PsA synovial fibroblasts (SFC) were cultured with candidate pro-inflammatory stimuli including; TLR ligands (PAM, PolyIC, LPS), pro-inflammatory cytokines (TNF- α , IL-1 β , IL-17). Total RNA was extracted using the Qiagen miRNeasy kit, and expression of miR-23a was measured by Sybr Green real-time PCR. In parallel, IL-6, IL-8 and MCP-1 were quantified in culture supernatants by ELISA. Clinical demographics such as CRP, TJC and SJC were also assessed.

Results: A significant increase in miR-23a expression was demonstrated in PsA PBMC versus OA (p=0.0476) and HC (p=0.0186). In contrast, a significant decrease in miR-23a expression was observed in PsA synovial tissue compared to OA (p=0.0172). MiR-23a synovial tissue expression inversely correlated with matched PBMC miR-23a expression (r=-1.00, p=0.0167) and DAS28-CRP (r= -0.5294, p=0.035). TLR activation via PolyIC (TLR3) and LPS (TLR4) significantly decreased miR-23a expression in PsA SFC (all p<0.05), with no effect observed for pro-inflammatory cytokines. This was

paralleled by a significant induction of IL-6, IL-8 and MCP-1 in response to LPS and PolyIC (all p<0.05). Finally, in silico analysis identified PDE4B and PTK2B, genes involved in osteoclast function and multiple immune pathways, as potential targets for miR-23a.

Conclusions: We report altered expression and regulation of miRNA in PsA, levels of which were inversely associated with joint inflammation. MiR-23a may be an important regulator of pathogenesis in PsA and may represent a potential target for therapeutic strategies. Further work will examine the functional role of miR-23a and its implications on disease pathogenesis in PsA.

ABSTRACT 45 (15A162) POSTER PRESENTATION

Traditional cardiovascular risk factors and diastolic function in myositis and myositis-associated conditions

Author(s): M O'Sullivan, S Cuddy, A Curran, A Gsel, V Tormey, J Carey, C Sullivan

Department(s)/Institution(s): Galway University Hospitals

Introduction: Accelerated cardiovascular disease (CVD) is now well recognised in rheumatoid arthritis and SLE. Traditional cardiovascular risk factors contribute to this excess risk. Less is known about the burden of cardiovascular disease in patients with idiopathic inflammatory myopathies (IIM). These patients often have a high inflammatory burden and require prolonged use of corticosteroids, both of which increase cardiovascular risk. Treatment of traditional CV risks is challenging in IIM patients particularly with regard to the use of statin therapy. Diastolic dysfunction occurs frequently without clinical symptoms and is associated with an increase in mortality and incident congestive heart failure. Clinical conditions responsible for primary diastolic dysfunction include hypertension, coronary artery disease and cardiomyopathy

Aims/Background: To identify and treat traditional cardiovascular risk factors in patients with IIM and to screen for presence of diastolic dysfunction.

Method: Patients with a diagnosis of polymyositis (PM), dermatomyositis (DM), anti-synthetase syndrome (ASS) or myositis-scleroderma overlap syndrome under active follow-up were screened for traditional cardiovascular risk factors during their routine rheumatology review. They had a blood pressure recorded, serum glucose and lipid profile measured. They completed a questionnaire regarding smoking and family history. A subset of this cohort also had a transthoracic echocardiography, including tissue Doppler imaging, to screen for diastolic dysfunction.

Results: 23 patients were studied. The mean age was 52 years (SD +/- 18) and 73% were female. 26% were smokers. 52% (12/23) had evidence of high blood pressure on 2 separate readings and 5 patients had a prior diagnosis of hypertension. 34% (8/23) of the group had LDL concentrations higher than guideline recommendations for primary prevention of CVD, however, only 2 of these patients were on a lipid lowering medication. 12 patients had a transthoracic echocardiogram performed. 3 patients had evidence of diastolic dysfunction. This was grade 1 (mild) in all 3 cases.



Conclusions: In this cohort we have found that a number of traditional CVD risk factors were prevalent. There is concern amongst clinicians with respect to statin use in the setting of IIM and further research regarding their safety is required. Diastolic dysfunction exists in a small proportion of our group of patients. Further cardiac investigation in large scale studies is required to elucidate whether diastolic dysfunction represents subclinical myocardial involvement in IIM or is a consequence of coronary atherosclerosis and uncontrolled hypertension.

ABSTRACT 46 (15A170) POSTER PRESENTATION

Frequency of vertebral fracture on Lateral Vertebral Assessment in patients with Osteopenia undergoing DXA scanning

Author(s): Ali Al Shamsi, Maurice Barry, Eithne Murghy, Trevor Duffy, Catherine Corry

Department(s)/Institution(s): Rheumatology Department, Connolly Hospital

Introduction: Previous low trauma fracture is a strong predictor of future fracture. Lateral Vertebral Assessment (LVA) is useful to screen for preexisting but undiagnosed vertebral fracture. It is however commonly not performed at the time of DXA scanning. Anti resorptive therapy is frequently withheld in patients with Osteopenia on DXA as fracture risk is perceived not to be high. This perception might change if LVA performed at the time of DXA scanning demonstrated previous fracture.

Aim & Background: The aim of this study was to measure the frequency of vertebral fracture on LVA in patients found to have Osteopenia on DXA.

Method: DXA scans from 170 female patients from two centers in Ireland (Connolly Hospital / Clane Hospital) performed in 2103/2014 were analyzed retrospectively. Patients ranged in age from 40 to 90 years. All patients had T-score between -1.0 and -2.5. They underwent Lateral Vertebral Assessment at the same session following BMD measurement.

All patients are scanned by the same certified densitometry technologist at both centers, using quantitative (vertebral morphometry) and semiquantitative (visual assessment). The scans were reported by a consultant Rheumatologist and Rheumatology registrar. A vertebral fracture was diagnosed if identified by all 3 reviewers.

Results: 41 out of 170 Osteopenic patients i.e. 24% had vertebral fractures seen on LVA. 51 fractures in total were identified, involving 32 thoracic and 19 lumbar vertebrae. They all occurred in those above 50 years of age, and the frequency of fractures increased with age. 43 of the fractures were classified as mild, 3 as moderate and 5 as severe fractures according to Genant et al. (4)

Conclusion: Our study emphasizes the importance of LVA in identifying vertebral fractures in osteopenic patients. In view of its advantages, we suggest that any patient undergoing DXA assessment should have an LVA performed regardless of age.

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ABSTRACT 47 (15A171) POSTER PRESENTATION

Abatacept Reduces Foxp3 Positive Regulatory T-Cells in Psoriatic Arthritis Synovial Tissue; A Single Centre, Placebo-Controlled, Crossover Study

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Background: Abatacept selectively inhibits T-cell activation via CD80/CD86:CD28 co-stimulation pathway and decreases serum levels of inflammatory cytokines implicated in the pathogenesis of psoriatic arthritis (PsA). Abatacept 3mg/kg dose was associated with better skin response, whilst 10 mg/kg dose showed better ACR response in PsA [1]. Data is limited on the immunopathological effect of abatacept in PsA synovium.

Objectives: (1) to study the change in immunohistochemical markers of synovial inflammation from baseline to 6 months after introducing abatacept in patients with active PsA; (2) to evaluate the impact of a short period of abatacept 3 mg/kg treatment on both skin and joint-related clinical outcomes compared to placebo (PBO); (3) to investigate if cell markers of synovial inflammation correlate to disease activity and MRI scores.

Methods: Biological-naïve PsA patients with active disease for >3 months with synovitis of a knee were enrolled. Patients were randomised to receive abatacept 3mg/kg or PBO infusion on day 1, 15 and 29; thereafter abatacept 10mg/kg was administered every 28 days for 5 months.

MRI and synovial biopsy of the involved knee were obtained at 0, 2 and 6 months. Immunohistological staining for CD3, CD4, CD8, FoxP3 and CD31 was performed and expression was scored on a 5 point scale using a semi-quantitative method [2]. FoxP3 (%/300 cells) and CD31 expression (positive vessels/10 HPF) was evaluated. The PsAMRIS semi-quantitative method was used to score MRI scans [3].

Results: 15 patients (8 female/7 male) with mean age of 45 years were recruited. Four patients were on methotrexate. 73% and 90% of patients were EULAR responders at 2 and 6 months. Synovial FOXP3 expression showed significant reduction



($p=0.027$) and there was a marked reduction in CD4 expression ($p=0.073$) at 6 months. Disease activity measures and cell markers did not show a significant difference between the treatment and PBO groups, improvement in MRI score in the first 2 months was greater in the treatment group ($p=0.02$). CD3 correlated with both disease activity and MRI scores.

Conclusions: Abatacept reduced CD4 positive T-cell expression in the synovium. This is the first study showing significant reduction in synovial FOXP3+ Treg expression in PsA patients treated with abatacept.

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ABSTRACT 48 (15A175) POSTER PRESENTATION

A quality improvement project to facilitate delivery of high quality care to patients with Sjögren's Syndrome

Author(s): Dr Bryan Murphy, Dr Claire Riddell, Dr Elisabeth Ball

Department(s)/Institution(s): Musgrave Park Hospital, Belfast

Introduction: With emerging evidence for B-cell depletion therapy in Sjögren's Syndrome^{1,2,3} it is important patients who may benefit from these therapies are accurately diagnosed, disease severity recorded and those at risk for lymphoma appropriately monitored.

We audited patients attending the Belfast Lupus and Connective Tissue Disease Clinic to document Sjögren's disease burden; established a database and contributed to the United Kingdom Primary Sjögren's Syndrome Registry (UKPSSR).

Aims:

Identify primary (PSS) and secondary Sjögren's Syndrome (SSS) patients attending the clinic

Determine diagnostic accuracy according to 2002 American-European Consensus Criteria (AECG)⁴ and 2012 American College of Rheumatology classification criteria (ACR)⁵

Record disease severity using clinician ESSDAI⁶ and patient ESSPRI⁶ scores

Ensure appropriate follow-up of patients to prevent accumulation of disease damage and enable early lymphoma diagnosis

Register data to UKPSSR (<http://sjogrensregistry.org/index.php>); a national database for PSS research

Methods:

Patients identified as PSS or SSS from reviews over a 1year period

Audit of charts was performed and registered with the local audit department

Where available documented demographics, diagnostic features, blood tests and lymphoma risk-factors

PSS patients invited to a clinic where ESSDAI/ESSPRI scores, Schirmer's test and salivary-flow were documented to confirm primary status and consenting patients registered to UKPSSR

Results: Results and database; see Table 1. ACR diagnostic criteria are limiting as we do not routinely refer for lip biopsy or ocular staining scores; 12/15 met AECG criteria. ESSDAI rises with prolonged disease duration however correlation with ESSPRI, Schirmer's and salivary-flow was not always clear. Three patients had three lymphoma risk-factors, one developed parotid lymphoma. Another had resolution of parotid enlargement following Rituximab.

Table 1; Characteristics of our patients identified from note review and Sjogren's clinic

| | |
|--|--|
| Total patients | 38 |
| Number of Primary Sjogrens patients | 22 |
| Number of Secondary Sjogrens patients | 16 |
| Diseases associated with Secondary Sjogren's | Systemic Lupus Erythematosus - 14 Undifferentiated Connective Tissue Disease - 1 Mixed Connective Tissue Disease - 1 |
| | |
| Primary Sjogren's patients | Number of patients or Mean (Range) |
| Age at diagnosis (n=19) | 54.32 years (28-74) |
| Where diagnosed (n=19) | Belfast Trust - 17 Devon, UK - 1 Poland - 1 |
| Duration of disease (n=18) | 14.2 years (2-45) |
| Sicca symptoms (n=21) | 19 |
| Schirmer's test; Left eye (n= 15) | 11.53mm/5mins (0-37) |
| Right eye (n= 15) | 8.73mm/5mins (0-35) |
| Unstimulated salivary flow (n=15) | 1.4ml/15mins (0-7) |
| Positive Schirmer's, negative salivary flow (n=15) | 1 |
| Negative Schirmer's, positive salivary flow (n=15) | 3 |
| Positive Schirmer's, positive salivary flow (n=15) | 8 |
| Negative Schirmer's, negative salivary flow (n=15) | 3 |
| Serology (n=15); Anti-Ro +ive only | 4 |
| Anti-La +ive only | 1 |
| Anti-Ro and Anti-La +ive | 8 |
| Both negative | 2 |
| ESSDAI (n=15); max. /123 | 9 (0-31) |
| ESSPRI (n=15); max. /10 | 5.47 (1.67-10) |
| Lymphoma Indicators (n=15); Low C4 complement | 1 |
| Parotid enlargement | 3 |
| Peripheral neuropathy | 2 |
| Palpable purpura | 0 |
| Vasculitis | 1 |
| Leucopenia | 4 |
| Cryoglobulinaemia (n=4) | 0 |
| Hypergammablobulinaemia | 9 |
| Comorbidity (n=15); Osteoarthritis | 2 |
| Inflammatory arthritis | 1 |
| Fibromyalgia | 1 |
| Arthralgia | 4 |
| Raynaud's | 2 |
| Discoid cutaneous Lupus | 1 |
| Hypothyroid disease | 4 (+1 subclinical) |
| Hypertension | 4 |
| Renal Tubular Acidosis | 1 (+1 who did not attend) |
| Chronic kidney disease (unspecified) | 1 |
| Pulmonary fibrosis | 3 |
| Bronchiectasis | 1 |
| Malignancy | 1 (breast), 1 (endometrial), 1 (parotid lymphoma) 1 fallopian tube cancer in patient who did not attend |
| Treatments trialled (n=15); Hydroxychloroquine | 10 |
| Methylprednisolone | 1 |
| Methotrexate | 3 |
| Mycophenolate Mofetil | 1 |
| Sulphasalazine | 2 |
| Azathioprine | 2 |
| Rituximab | 1 |

Conclusion: Data collection provides invaluable information to guide clinical decisions and service development. Using our database we now document relevant features, tests and lymphoma risk-factors and consider ocular staining or salivary gland biopsy if uncertain. Disparity between some patients' higher self-reported ESSPR compared with clinician ESSDAI raises management challenges. Those with lymphoma risk-



factors will be reviewed more frequently given reported relative-risk of non-Hodgkins lymphoma at 13.76 in PSS⁷. Data was registered with the UKPSSR to aid ongoing research into PSS.

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ABSTRACT 49 (15A180) POSTER PRESENTATION

Initial Results from a Combined Rheumatology /Dermatology Connective Tissue Disease Clinic in Belfast

Author(s): L McDonald, M McCarron, C McCourt, D O'Kane, C Riddell, E Ball

Introduction: Comprehensive management of Connective Tissue Disease (CTD) often requires both dermatological and rheumatological input, and successful management of complex cases often requires a holistic, multi-disciplinary approach.

Aims/Background: Combined clinics offer the opportunity for immediate clinician interaction and improved standards of care, while avoiding duplication of clinic appointments and enhancing inter-disciplinary co-operation.

Methods: A total of 20 patients were identified to attend three separate pilot clinics in October 2014, January and June 2015. Suitability was determined by the presence of a dermatological issue in the context of a possible or known diagnosis of SLE/CTD. For each patient clinical, immunological and previous treatment data was collated prior to assessment. At each clinic two consultant rheumatologists and two consultant dermatologists were in attendance and an agreed combined management plan formulated. Patients were given anonymised patient satisfaction questionnaires.

Results: 8/20 (40%) of patients had an established diagnosis of SLE/CTD overlap syndrome or discoid lupus. The remaining 12/20 (60%) patients had suspected diagnoses of SLE/CTD (9/20 (45%)) or SLE/dermatomyositis (3/20 (15%)). Median (range) disease duration was 4 (0.5, 15) years.

Over half (11/20 (55%)) of patients received a new dermatological diagnosis following attendance. 3/20 (15%) had a suspected diagnosis of SLE/CTD/dermatomyositis confirmed. 2/20 (10%) had an unclear aetiology but a CT rash was excluded. 5/20 (25%) commenced new treatment for their disease following combined assessment. 3/20 (15%) were teaching cases demonstrating treatment side effects or variants of cutaneous lupus.

5/20 (25%) of patients were awaiting Dermatology review at the time of clinic assessment, 8/20 (40%) were known to a Dermatologist, 3/20 (15%) were being considered for referral. Following joint assessment 10/20 (50%) required ongoing Dermatological follow-up. 5/20 patients (25%) avoided an unnecessary Dermatological referral.

In terms of patient satisfaction, 100% of responders rated the helpfulness of combined assessment 5 or above (1=not helpful and 7=very helpful) and 71% found it 'very helpful'.

Conclusion: Although these initial numbers are small we anticipate that future continued collaboration with our dermatology colleagues will generate robust data to justify the establishment of a more permanent model of combined care for CTD patients within the Belfast Trust.

ABSTRACT 50 (15A182) POSTER PRESENTATION

Strikingly High Prevalence of the Risk Factors for Low Bone Mineral Density and Estimated Fracture and Fall Risk Among Medical Inpatients: A Missed Opportunity

Author(s): Kamil Khan, Lorraine Thong, Kabir Ali, Fayyaz Janjua, Muhammad Haroon

Department(s)/Institution(s): Division of Rheumatology, Department of Medicine, Kerry General Hospital

Aims: 1) to calculate the absolute fracture risk by examining the clinical risk factors used in fracture risk assessment (FRAX) model and to determine the proportion of patients whose absolute fracture risk exceeds the National Osteoporosis Foundation (NOF) thresholds for treatment; 2) to assess the risk of falls, especially among patients with increased risk of fractures; 3) to examine the patient's knowledge of osteoporosis and to investigate the patterns of any osteoporosis-related investigations and treatments used in these patients.

Methods: A questionnaire-based study and was carried out in two steps. The first step involved having a short interview with the patient and fall assessment was made by using Fracture Risk Questionnaire (FRQ), and in the second step their clinical records were reviewed to populate the 11 clinical risk factor variables used in the FRAX model. The study participants were all inpatients aged ≥ 50 years admitted to the medical wards at Kerry general Hospital. For the whole cohort, FRAX risk scores were calculated without information on bone density.

Results: Consecutive 200 medical inpatients were evaluated, and the mean age of the cohort was 73.8 \pm 9 years. Previous personal history of low fragility fracture was present in 20.5% (n=41) of patients. Only 21% (n=42) of patients reported having had a DEXA scan and 62.5% of the cohort (n=125) was familiar with osteoporosis. Only 31% (n=62) of the cohort was currently using some form of bone-related treatment (supplemented



calcium and vitamin D only, n=48, 24% of the cohort; oral bisphosphonates 6.5% of the cohort, n=13; only one patient was using hormone replacement therapy). 63% of patients were noted to be at the risk of fall. The absolute 10 years risk of major osteoporotic fracture was 15±12, and of hip fracture was 7.6±11. We noted that 25.5% (n=51) and 64.5% (n=129) of the cohort had fracture risks exceeding the NOF thresholds for treatment.

Conclusions: A very high prevalence of elevated fracture and fall risk was noted. A medical inpatient stay offers a window of opportunity for assessment of osteoporotic fracture risk and the initiation of appropriate bone protection.

ABSTRACT 51 (15A183) POSTER PRESENTATION

Prevalence and clinical features of Arthritis Mutilans (AM) patients attending a Dublin rheumatology unit.

Author(s): Musaab Elmamoun¹, Muhammad Haroon², Phil Gallagher¹, Oliver FitzGerald¹

Department(s)/Institution(s): ¹Department of Rheumatology, St. Vincent's University Hospital, Dublin, Ireland
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Background: Psoriatic Arthritis (PsA) affects about 30% of individuals with psoriasis after an average interval of 10 years^{1, 2}. AM is a rare type of PsA. The prevalence of AM has been estimated to range from zero or just 1%^{3, 4} to up to 8%⁵ of the PsA population.

Objective: To determine the demographic and clinical characteristics of AM in an Irish cohort attending a rheumatology unit.

Methods: Patients with a diagnosis of PsA, fulfilling the CASPAR criteria, who have AM were included. AM was defined by digital shortening, erosion involving entire articular surfaces on both sides of the joint and/or pencil-in-cup change and/or osteolysis. 23 patients, aged > 18 years were included after clinical and radiological examination.

Results: The female to male ratio was close to 2 : 1. The mean age was 56.52. The mean age of skin disease onset was 24 years and the mean age of onset of joint disease was 30 years. At inclusion, the mean duration of arthritis was 25.8 years ± 9.9 years. The only pattern of arthritis observed in patients with AM was that of polyarticular disease; with 48% of patients exhibiting axial disease. Enthesitis was found in 8 patients (35%), while 13 patients (57%) had dactylitis. 8 patients (35%) had sacroiliitis on plain films, 6 of these patients (75%) had asymmetrical sacroiliitis. 21 patients (91%) had nail disease. None of the patients in this cohort had uveitis. At the time of inclusion, 70% of patients were found to have clear or almost clear skin. 16 patients were on biologics (75%). The most frequent joints that showed AM were the MTP joints on the fourth toe on the left foot (n = 10), followed by MTP joints on the fourth toe on the right (n = 9). Further characteristics are outlined in table 1.

Conclusion: The prevalence of AM in our psoriatic arthritis cohort (n=282) is approximately 8%. The majority of patients present with nail disease, and mild skin disease. The average

interval between skin and joint disease is approximately 6 years. AM occurs in the setting of polyarticular disease and frequent axial involvement. The axial disease in these patients tends to be asymmetrical. Many patients require biologics to control their disease.

| | n = 23 |
|--|------------------|
| Gender, females: males, n (%) | 15 (65) : 8 (35) |
| Age, mean (S.D.), years | 56.52 (11.26) |
| BMI, mean (S.D.) | 29.24 (5.4) |
| Smoking status: Never, n (%) | 12 (52) |
| Previous, n (%) | 9 (39) |
| Current, n (%) | 2 (8.6) |
| Packs year, mean (S.D.) | 6.609 (9.628) |
| RF positive, n (%) | 0 (0) |
| ACPA positive, n (%) | 1 (4.3) |
| Family history of Ps, n (%) | 15 (65) |
| Family history of PsA, n (%) | 4 (17) |
| Personal history of diabetes, n (%) | 1 (4.3) |
| Personal history of hypertension, n (%) | 10 (43) |
| Personal history of lipid disorder, n (%) | 7 (30) |
| Ps age of onset | 24.04 (12.34) |
| PsA age of onset | 30.65 (12.78) |
| PsA disease duration | 25.87 (9.924) |
| Ps type, plaque, n (%) | 18 (78) |
| Pattern of arthritis, polyarticular/ oligoarticular disease, n (%) | 23 (100)/0 (0) |
| Axial disease, n (%) | 11 (48) |
| BSA maximum ever, mean (S.D.), percentage | 11.13 (13.13) |
| PASI current, mean (S.D.) | 2.296 (2.865) |
| Enthesitis, n (%) | 8 (35) |
| Dactylitis, n (%) | 13 (57) |
| Uveitis, n (%) | 0 (0) |
| Nail involvement, n (%) | 21 (91) |
| Number of deformed joints, mean (S.D.) | 17.87 (11.34) |
| New bone formation, n (%) | 11 (48) |
| Osteolysis, n (%) | 20 (87) |
| Sacroiliitis, n (%) | 8 (35) |
| Asymmetrical, n (%) | 6 (75) |
| Number of joints affected by arthritis mutilans, mean (S.D.) | 11 (8) |
| Patients on biologics, n (%) | 16 (75) |
| Ps requiring biologics, n (%) | 3 (13) |
| Current CRP, mean (S.D.) | 3.485 (2.968) |
| mHAQ, mean (S.D.) | 0.777 (0.577) |
| Patient's global assessment, 100-mm VAS, mean (S.D.) | 9.545 (13.08) |
| Physician's global assessment, 100-mm VAS, mean (S.D.) | 1.333 (3.104) |

Table 1 Patients' characteristics

BMI Body Mass Index; RF, rheumatoid factor; ACPA, anti-citrullinated protein antibody; Ps, psoriasis; PsA, psoriatic arthritis; BSA, Body Surface Area; PASI, Psoriasis Area Severity Index; CRP, C-Reactive Protein; mHAQ modified Health Assessment Questionnaire

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ABSTRACT 52 (15A184) POSTER PRESENTATION

Measuring Outcome in Psoriatic Arthritis (MOPSA), a new web-based tool for assessment of Psoriatic Arthritis (PsA): results of patient satisfaction audit

Author(s): Elmamoun M, Szentpetery A, Gallagher P, FitzGerald O

Department(s)/Institution(s): Department of Rheumatology, St. Vincent's University Hospital

Introduction: Psoriatic Arthritis (PsA) affects about 30% of individual with psoriasis¹. PsA is a multifaceted disease that affects different domains. The five main domains that are affected are peripheral arthritis, axial disease, skin and nail disease, dactylitis, and enthesitis.

Minimal Disease Activity (MDA) is defined as a patient acceptable disease state which is increasingly recognised as a treatment target. MDA is defined when a patient has 5 of the following 7 criteria: tender joint count ≤ 1 , swollen joint count ≤ 1 , tender enthesal point ≤ 1 , PASI ≤ 1 or body surface area $\leq 3\%$, Pain Visual analogue score (VAS) ≤ 15 , patient global ≤ 20 , Health Assessment Questionnaire ≤ 0.5 ². These criteria have been validated and can be used as a responder index in addition to a target for treatment interventions.

Composite Psoriatic Disease Activity Index (CPDAI) assesses the five domains in PsA. Within each domain a score (range 0–3) is assigned according to predefined cut-offs. The scores for each domain are then added together to give a final score range of 0–15, 0 for no disease and 15 for severe disease.³

Recently, Measuring Outcome in Psoriatic Arthritis (MOPSA), a new web-based tool for assessment of PsA was developed and is freely available to use (see <https://mopsa.ie>). MOPSA will determine MDA state and calculate CPDAI score.

Methods: 46 patients with PsA, fulfilling CASPAR criteria, were included over a 2 month period. Patients were required to complete both paper-based and online-based questionnaires. Half of patients filled one of the questionnaires first (either paper-based or online-based). Patient's satisfaction survey forms were handed to patients following completion of paper-based and online-based questionnaires.

Results: 24 patients were females and 22 males. 85% of patients were 60 years old or younger. 64% of patients in paper-based group versus 78% of patients in online-based group completed the questionnaires in less than 10 minutes. 96% of patients found the online questionnaire easy to understand and indicated that they intend to use again.

Conclusion: On-line questionnaire using MOPSA was clearly time effective and the overwhelming majority of patients were happy to use it.

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2. Coates LC, Fransen J, et al: Defining minimal disease activity in psoriatic arthritis: a proposed objective target for treatment, *Ann Rheum Dis.* 69:48–53, 2010

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ABSTRACT 53 (15A185) POSTER PRESENTATION

Identification of a link between Genotype and phenotype in Psoriatic Arthritis (PsA)

Author(s): Elmamoun M¹, Butt A², Winchester R³, Pennington S², FitzGerald O^{1, 2}

Department(s)/Institution(s): ¹St. Vincent's University Hospital

²The Conway Institute of Biomolecular and Biomedical Research, University College Dublin

³Columbia University, New York

Introduction: Psoriatic Arthritis (PsA) is a heterogeneous disease with diverse clinical and radiographic manifestations. A number of Human Leukocyte Antigen (HLA) alleles were found to be associated with PsA, these are HLA C06, B*08:01, B*27:05, C*06:02, B*39:01 and B*38:01^{1, 2}. HLA C06 is associated with severe skin disease and late onset, milder musculoskeletal phenotype. HLA B27:05 is associated with enthesal based disease; severe musculoskeletal disease, enthesitis, symmetric SI and mild psoriasis. HLA B08:01 is associated synovial based disease; asymmetric sacroiliitis (SI), joint deformity, joint fusion and dactylitis. HLA B38:01/39:01 is associated with more axial involvement and joint damage progression³.

Hypothesis: Our hypothesis is that specific HLA molecules bind different peptides that trigger different immunological responses resulting in different clinical phenotype

Methods: Patients with a diagnosis of PsA, fulfilling the CASPAR criteria, aged > 18 years were included, 10 patients from each HLA group. We included a fifth distinct group, Arthritis Mutilans (AM), as defined by Group for Research and Assessment of Psoriasis and Psoriatic Arthritis (GRAPPA) that has no identical genotype as of yet. Patients had a full assessment that included musculoskeletal and dermatological examination. Blood samples and Peripheral Blood Mononuclear Cells (PBMCs) were obtained from patients following preparation. Within 40 minutes of collection of blood by venipuncture, the serum was separated after centrifugation at 1800 rpm for 15 min, and aliquots were stored at -80°C until further processing. Proteins were measured from sera and the 14 most abundant proteins, High Abundant Protein (HAPs) (90–95% of total proteins), were separated using chromatographic separation by immunoaffinity column. Elution Buffer A (Agilent, 5185-5957), Elution Buffer B (Agilent, 5185-5988), 1L ddH₂O, 1L20% ethanol reagents were used in the protein depletion.

Results: The percentage of Low Abundant Proteins (LAPs) following depletion was less 6% of the total proteins in all groups, see Table1. These LAPs are then going to be analysed by Mass Spectrometry-based proteomics to identify differentially expressed proteins in each group.

Conclusion: The percentage of LAPs measured in our groups is,



strongly, consistent with what is considered to be an optimum percentage for further protein digestion and analysis in the literature.

| Group | Total volume of sample | Protein Concentration after Depletion (ug/ul) | Volume of Depleted Protein Fraction (ul) | Total amount of Low Abundant Protein (LAP) Fraction (ug) | Percentage of LAPs |
|----------------|------------------------|---|--|--|--------------------|
| AM | 93.25 | 0.215 | 269 | 57.84 | 3.4 |
| HLA B27 | 90.29 | 0.56 | 175 | 98 | 5.76 |
| HLA B08 | 89.31 | 0.18 | 370 | 66.6 | 3.92 |
| HLA B38/39 | 90.33 | 0.37 | 270 | 99.9 | 5.88 |
| HLA C06 | 92.33 | 0.35 | 271 | 94.85 | 5.58 |
| Reference pool | 91.1 | 0.22 | 277 | 60.94 | 3.58 |

Table 1. Showing the percentage of Low Abundant Protein (LAP) after depletion in each group. Each group consists of a pool from patients in the group (n = 10). A reference pool is made of patients from all group (n = 50). HLA, Human Leukocyte Antigen; AM, Arthritis Mutilans

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2. Eder L, Chandran V, Pellet F, et al: Human leukocyte antigen risk alleles for psoriatic arthritis among patients with psoriasis, *Ann Rheum Dis* 71(1):50-5, 2012
3. Haroon M, Winchester R, Giles JT, et al: Certain class I HLA alleles and haplotypes implicated in susceptibility play a role in determining specific features of psoriatic arthritis phenotype, *Ann Rheum Dis*, 2014 Sep 26

ABSTRACT 54 (15A190) POSTER PRESENTATION

High Prevalence of Traditional Cardiovascular Risk Factors in Ankylosing Spondylitis Registry of Ireland (ASRI) Cohort

Author(s): Fitzgerald G¹, Gallagher P², O Sullivan C³, O'Rourke K⁴, Sheehy C⁵, Stafford F⁶, Silke C⁷, Haroon M⁸, Landon DJ⁹, Mullan R¹⁰, FitzGerald O², O Shea F¹.

Department(s)/Institution(s): 1 St James's Hospital; 2 St Vincent's Hospital; 3 Galway University Hospital; 4 Midlands Regional Hospital Tullamore; 5 University Hospital Waterford; 6 Blackrock Clinic; 7 Sligo General Hospital; 8 Kerry General Hospital; 9 University College Dublin; 10 Tallaght Hospital

Introduction: Ankylosing Spondylitis (AS) is an independent risk factor for cardiovascular (CV) disease.¹ Due to the predominantly young age of patients, screening for traditional CV risk factors is often not considered.

Aims/Background: The AS Registry of Ireland (ASRI) provides descriptive epidemiological data on the AS population in Ireland. The aim of this study was to evaluate the prevalence of traditional CV risk factors in a well characterised AS patient cohort.

Methods: A standardised clinical assessment was performed on each patient and structured interviews provided patient-reported data, which included the presence of traditional CV risk factors and other comorbidities. Statistical analysis was performed using SPSS.

Results: As of June 2015, 340 patients have been included in ASRI (79.7% males; mean age 47.6 (SD 12.6); mean disease duration 21.6 years (SD 12); average delay to diagnosis of 8.9 years (SD 8.5)). Mean BASDAI was 3.9 (SD 2.4), BASFI 3.8 (SD 2.6) and HAQ 0.56 (SD 0.52). The most prevalent comorbidities were hypertension (25.9%), hyperlipidaemia (20.9%) and smoking (ex-smoker 32.1%, current 27.4%). Patients were more likely to have a higher BASDAI if they were a smoker (p<0.05) or had depression (P<0.001), with a trend towards higher disease activity in those with hypertension (p=0.06). Higher BASFI scores were associated with hypertension, osteoporosis, diabetes and hyperlipidaemia (p<0.05).

Conclusion: There is a high prevalence of traditional CV risk factors in this patient cohort. The presence of co-morbidities is associated with higher disease activity and functional impairment in this patient cohort. With increasing focus on AS as an independent risk factor for CV disease, quality improvement initiatives are needed to improve the recognition of traditional CV risk factors among AS patients.

References:

1. Peters MJ, Visman I, Nielen MM, et al. Ankylosing spondylitis: a risk factor for myocardial infarction? *Ann Rheum Dis* 2010;69:579-81.

ABSTRACT 55 (15A191) POSTER PRESENTATION

Low Osteoporosis Screening Rates in Ankylosing Spondylitis Registry of Ireland (ASRI) Cohort

Author(s): Fitzgerald G¹, Gallagher P², O Sullivan C³, O'Rourke K⁴, Sheehy C⁵, Stafford F⁶, Silke C⁷, Haroon M⁸, Landon DJ⁹, Mullan R¹⁰, FitzGerald O², O Shea F¹.

Department(s)/Institution(s): 1 St James's Hospital; 2 St Vincent's Hospital; 3 Galway University Hospital; 4 Midlands Regional Hospital Tullamore; 5 University Hospital Waterford; 6 Blackrock Clinic; 7 Sligo General Hospital; 8 Kerry General Hospital; 9 University College Dublin; 10 Tallaght Hospital

Introduction: Osteoporosis is a complication of Ankylosing Spondylitis (AS)¹ and international recommendations state that these patients should be assessed for low bone mineral density (BMD)².

Aims/Background: The AS Registry of Ireland (ASRI) provides descriptive epidemiological data on the Irish AS population. The aim of this study was to explore the prevalence of low BMD and screening by dual-energy x-ray absorptiometry (DXA) in an AS patient cohort.

Method: A standardised clinical assessment was performed on each patient and structured interviews provided patient-reported data. Patients were categorised by the presence or absence of DXA testing and further subcategorised by T score into normal



BMD, osteopenia or osteoporosis. Statistical analysis was performed using SPSS.

Results: As of June 2015, 340 patients have been included in ASRI (79.7% males; mean age 47.6 (SD 12.6); mean disease duration 21.6 years (SD 12); average delay to diagnosis of 8.9 years (SD 8.5)). Mean BASDAI was 3.9 (SD 2.4), BASFI 3.8 (SD 2.6) and HAQ 0.56 (SD 0.52). Self-reported prevalence of osteoporosis was 7.4%. 25% of the population had DXAs performed. Of these, 52.9% had normal BMD, 30.6% had osteopenia and 16.5% had osteoporosis. Older patients and men were more likely to have both osteopenia and osteoporosis ($p < 0.05$). Patients were more likely to have a DXA with longer disease duration ($p < 0.001$), older age group ($p < 0.001$), higher functional disability ($p < 0.05$) and the presence of hypertension ($p < 0.001$).

Conclusions: Osteoporosis screening rates are low in this study. Of those screened, there is a high prevalence of both osteopenia and osteoporosis, raising concerns that osteoporosis is under-diagnosed in this cohort. This is one of few studies looking at osteoporosis screening in AS patients. Education plans for health care professionals and patients need to be improved.

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1. Karberg K, Zochling J, Sieper J, et al. Bone loss is detected more frequently in patients with ankylosing spondylitis with syndesmophytes. *J Rheumatol* 2005;32:1290-8.
2. Braun J, van der Berg R, Baraliakos X, et al. 2010 update of the ASAS/EULAR recommendations for the management of ankylosing spondylitis. *Ann Rheum Dis*. 2011 Jun;70(6):896-904.

ABSTRACT 56 (15A193) POSTER PRESENTATION

An analysis of FMS scores in an inter county Gaelic football team

Author(s): Fintan Whelan¹, Bernie McGowan², Bryan Whelan², Carmel Silke²

Department(s)/Institution(s): Dept of Life Sciences, Sligo IT
The North Western Rheumatology Unit, Our Lady's Hospital, Manorhamilton, Co Leitrim

Introduction: The functional movement screening (FMS) instrument developed by Cook et al [1] serves as a useful means of screening and evaluating functional movement of an athlete.

Methods: The FMS procedure consists of seven tests each designed to place the participant in extreme positions where weaknesses and imbalances become apparent if appropriate stability and mobility is not utilised. The identification of poor motor control and right to left asymmetries allows the identification of potential injury and provides the athlete with information on how to increase mobility or stability in the required areas [1] An FMS score of < 14 increases an athlete's risk of injury eleven fold during the playing season [2-5]. All players on a senior Gaelic inter county panel were invited to attend for FMS tests, at the beginning of the season. Players were excluded from the tests if they had a current injury.

Results: In total 23 of the inter county Gaelic footballers were included in the study, mean age 25.21 (\pm SD 3.27), mean FMS

score 14.96 (\pm SD 1.46). In total 7 (30%) of the panel had an FMS score of > 14 . Defenders had the highest mean FMS score of 15.5 (\pm 0.83), and midfielders had the lowest mean FMS score of 14.25 (\pm 0.95). When compared to the FMS score of eight other athletic groups, the mean FMS score of the present study cohort was amongst the lowest identified.

Conclusion: If risk factors for injury occurrence can be identified and addressed utilizing the FMS at the beginning of a playing season in elite gaelic footballers, then decreases in injuries and improved performance should follow.

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| 15A176 | Bryan Murphy | A case of profound arthralgia and myalgia in a well-controlled Rheumatoid Arthritis patient | Musgrave Park Hospital, Belfast |
| 15A179 | Edward McKeever | A case of prolonged corticosteroid use and Biopsy positive Temporal Arteritis | Musgrave Park Hospital, Belfast |
| 15A181 | Louise McDonald | Sensorineural Hearing Loss in SLE treated with Cyclophosphamide | Musgrave Park Hospital, Belfast |
| 15A186 | Orla Fitzpatrick | A re audit of documentation of consent and procedural information in clinical notes for intra-articular injections | NWRU, Manorhamilton |
| 15A187 | Mariam Al Hussona | Case report: A Blurred Diagnosis – IgG4 Related Disease | SVUH, Dublin |
| 15A189 | Gillian Fitzgerald | An unusual presentation of neuropsychiatric lupus | St. James's Hospital, Dublin |



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ORAL PRESENTATIONS: IRHPS

ABSTRACT 1

ORAL PRESENTATION

An Evaluation of the Effects of a Physiotherapy-led Exercise Class on Pain and Function in People with Knee Osteoarthritis

Author(s): Rachel Burke, Aisling Brennan

Department(s)/Institution(s): Tallaght Hospital Physiotherapy Department

Aim/Introduction: The lifetime risk of developing osteoarthritis (OA) of the knee is about 46%¹. A recent Cochrane systematic review determined that land-based therapeutic exercise is beneficial for people with knee OA in terms of reduced joint pain or improved physical function and quality of life². The aim of this study was to evaluate the effects of a 6-week physiotherapy-led exercise class on pain and function in people with knee OA.

Method: A hospital-based physiotherapist supervised a one-hour, circuit-based exercise class weekly for 6 weeks. The class was based on the ESCAPE (Enabling Self-management and Coping with Arthritic knee Pain through Exercise) programme. An independent assessor carried out all assessments on referral to the class and at 2 months following completion of the class. Pain was assessed using the Numerical Rating Scale. Function

was assessed using the Oxford Knee Score and the WOMAC questionnaire.

Results: Thirteen individuals completed the baseline and follow-up assessments. The cohort comprised of 9 males and 4 females with a mean age of 62.81 (range 56-69) years. Participants' pain score (NRS) and function (Oxford Knee Score, WOMAC) improved significantly following the 6-week knee class (Table 1).

Conclusion: A 6-week supervised exercise class appears to have a positive effect on pain and function in a population of people with knee OA referred for physiotherapy. A longer follow-up would be beneficial to ascertain if these improvements are sustained.

Table 1

| | Pre-intervention score | Post-intervention score | P value |
|--------------------------|------------------------|-------------------------|----------|
| NRS | 6.6/10 | 4.8/10 | p=0.0001 |
| Oxford Knee Score | 24.5/48 | 27.2/48 | p=0.0001 |
| WOMAC | 50.7/96 | 10.3/96 | p=0.0001 |

ABSTRACT 2

ORAL PRESENTATION

Evaluation of an OT-Led Work Stability Programme “Working Successfully with Arthritis” for Workers with Inflammatory Arthritis (IA)

Author(s): Oriel Corcoran (MSc. Clinical Therapies; BSc. Occupational Therapy); Eimear Lyons (MSc. Clinical Therapies; BSc. Occupational Therapy); Máire Caulfield (BSc. Occupational Therapy)

Department(s)/Institution(s): Dept of Occupational Therapy & Rheumatology at University Hospital Waterford (UHW); Dept. of Clinical Therapies, University of Limerick

Aim/Introduction: Work disability is pervasive among those with Inflammatory Arthritis (IA). This causes costs from human, societal and economic perspectives¹. Work disability can develop rapidly therefore early intervention is imperative. Vocational Rehabilitation (VR) has been shown to assist work retention for this population⁴, however VR programmes are sparse³. “Working Successfully with Arthritis”, an OT-led VR programme, aims to reduce work disability among people with IA.

Method: 100 workers attending the IA clinic completed the Work Instability Scale (WIS). 37/ 100 scales were returned;

19/37 demonstrated a moderate level of work instability². These were invited to attend 4 OT-led group intervention sessions in a community setting. 13/19 completed the programme. Pre and post evaluation was undertaken via health and work-related outcome measures (MDHAQ, AIMS 2-SF, ASES-SV, Euroqol 5D-5L, Work Productivity and Impact Questionnaire, Work Ability Score and Patient Satisfaction Questionnaire).

Results: See Table 1. N= 13; 6M: 7F. Mean age: 42, range 28 - 59 years. Diagnosis: 4: AS, 1: PsA, 5:RA. Participants worked a variety of hours and settings. Statistically significant changes in participants' symptom, physical functioning, psychological wellbeing, and pain scores were achieved. Patient satisfaction was also very positive.

Conclusion: This study demonstrates the potential impact of a cost-effective, replicable OT-led VR programme on work ability and health related outcomes for participants with IA. Findings contribute to the evidence base for OT led VR programmes and inform social policy regarding the key determinants of work ability and participation for those with IA in Ireland. Further longitudinal studies with a larger sample size are advised to examine generalizability of these results and to strengthen the evidence base in this area.

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Other important undesirable effects: palpitations; heart rate increased/decreased (**uncommon** ≥1/1000, <1/100), drug hypersensitivity including angioedema, anaphylaxis and anaphylactic shock (**uncommon** ≥1/1000, <1/100), respiratory depression (**rare** ≥1/10,000, <1/1000), convulsion (**rare** ≥1/10,000, <1/1000). No evidence of increased risk of suicidal ideation or suicide with Palexia SR. Additional information is available on request. **OVERDOSE:** Seek specialist treatment (see SmPC). **LEGAL CLASSIFICATION:** POM, CD (Schedule II). **MARKETING AUTHORISATION NUMBERS AND PACK SIZES:** 50 mg: PA 1189/7/4, 28 and 56 packs; 100 mg: PA 1189/7/5, 56 pack; 150 mg: PA 1189/7/6, 56 pack; 200 mg: PA 1189/7/7, 56 pack and 250 mg: PA 1189/7/8, 56 pack. **MARKETING AUTHORISATION HOLDER:** Grünenthal Ltd, Regus Lakeside House, 1 Furzground Way, Stockley Park East, Uxbridge, Middlesex, UB11 1BD, UK. **DATE OF PREPARATION:** November 2013. IRE/P13 0025b. **REFERENCE:** 1. Palexia SR Summary of Product Characteristics



Table 1:

| T-Test: Paired Two Sample for Means | Work Ability | Work Productivity | MDHAQ Physical Function | MDHAQ Psychol | VAS Pain | Vas Fatigue | ASES 2 SV |
|-------------------------------------|--------------|-------------------|-------------------------|---------------|-------------|-------------|-------------|
| Mean | 5.692307692 | 6.461538 | 1.247153846 | 2.96153846 | 4.769230769 | 5.807692308 | 6.481923077 |
| Variance | 4.397435897 | 4.102564 | 0.711131974 | 2.90089744 | 5.358974359 | 4.564102564 | 1.609181411 |
| Observations | 13 | 13 | 13 | 13 | 13 | 13 | 13 |
| Pearson Correlation | 0.809316618 | 0.509824 | 0.811207342 | 0.71011643 | -0.30343662 | 0.102737533 | 0.494681587 |
| Hypothesized Mean Difference | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| df | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| t Stat | -1.877304409 | 1.833317 | 0.437165753 | 0.93847426 | 1.92111886 | 1.762839759 | 2.223081152 |
| P(T<=t) one-tail | 0.042495862 | 0.045833 | 0.334877403 | 0.18325333 | 0.039393716 | 0.051675891 | 0.023090972 |
| t Critical one-tail | 1.782287556 | 1.782288 | 1.782287556 | 1.78228756 | 1.782287556 | 1.782287556 | 1.782287556 |
| P(T<=t) two-tail | 0.084991724 | 0.091666 | 0.669754805 | 0.36650665 | 0.078787431 | 0.103351783 | 0.046181943 |
| t Critical two-tail | 2.17881283 | 2.178813 | 2.17881283 | 2.17881283 | 2.17881283 | 2.17881283 | A2.17881283 |

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- 1: Bevan, S., McGee, R. and Quadrello, T. (2009b) *Fit For Work? Musculoskeletal Disorders and the Irish Labour Market*, London: The Work Foundation.
- 2: Gilworth, G., Emery, P., Barkham, N., Smyth, M., Helliwell, P. and Tennant, A. (2009) 'Reducing work disability in Ankylosing Spondylitis – development of a work instability scale for AS', *BMC Musculoskeletal Disorders*, 10(1), 68-72.
- 3: O' Brien, R., Woodbridge, S., Hammond, A., Adkin J. and Culley, J. (2013) *Musculoskeletal Care* (11) p. 99–105
- 4: Waddell, G., Burton, A. and Kendall, N. (2008) *Vocational rehabilitation: what works, for whom, and when*, London: The Stationery Office

POSTER PRESENTATIONS: IRHPS

ABSTRACT 3

POSTER PRESENTATION

Perceptions of fatigue and sleep dysfunction and barriers to exercise in people with fibromyalgia syndrome: a focus group study

Author(s): Russell D¹, Álvarez Gallardo IC², Wilson I¹, Hughes CM¹, Davison GW¹, McVeigh JG¹.

Department(s)/Institution(s): 1. Ulster University, 2. University of Granada.

Aim/Introduction: This study aimed to explore the perceptions of fatigue and sleep dysfunction and barriers to exercise in people with fibromyalgia syndrome (FMS).

Method: Three focus groups were conducted with people with FMS. Participants, who had experienced therapeutic exercise, were recruited from patient support groups (n=14). Focus groups were video and audio recorded, transcriptions were coded and analysed for thematic content by three independent evaluators and consensus coding meetings identified emerging themes. Ethical approval for this study was granted by Ulster University's Research Ethics Committee.

Results: The over-arching theme to emerge from the data was a lack of understanding of the condition by others. A sense of loss emerged as a major sub-theme and participants felt they had fundamentally changed since the onset of FMS. The impact of the condition also emerged as a sub-theme and barrier to exercise; linked to this was the invisibility of FMS. Normal activities of daily living were perceived as exercise. Participants felt that the negative and often prolonged effects of exercise or physical activity were not understood. Exercise was linked to sub-theme of 'loss' often being seen as something that was missed or part of the former 'self' prior to the onset of symptoms.

Conclusion: People with FMS report a lack of understanding of

the condition and expressed a profound sense of loss including the ability to engage in normal exercise and physical activity. This study highlights the importance of understanding and empathy when prescribing exercise for those with FMS.

ABSTRACT 4

POSTER PRESENTATION

Participants' perspectives of a 'Lifestyle Management for Arthritis Programme': experiences and implications for practice

Author(s): Jane Brownlee (BSc Occupational Therapy), Eoin Gorman (PhD candidate at UCC), Dr Jeanne Jackson (PhD Occupational Science and Occupational Therapy)

Department(s)/Institution(s): Occupational Science and Occupational Therapy Department, University College Cork Occupational Therapy Department, University Hospital Waterford

Aim/Introduction: The purpose of this study is to explore participants' perspectives of a 'Lifestyle Management for Arthritis Programme' (LMAP) (Hammond et al., 2008) following their attendance at module A of the programme in the occupational therapy department in University Hospital Waterford. Occupational therapy self-management programmes aim to assist individuals to incorporate health promoting behaviours and self-management strategies into their daily routines to maintain function and promote wellbeing (Iverson et al., 2010). Participants' perspectives of self-management programmes can assist in ascertaining patient-relevant outcomes from programmes and assist in programme development (Hammond, Bryan & Hardy, 2008).

Method: A qualitative study was carried out to explore participants' experiences of the LMAP. Purposive sampling was used to recruit participants for this study. Semi-structured interviews were carried out with five participants with inflammatory arthritis following attendance at the programme. Data was analysed using inductive thematic analysis.

Introducing A NOVEL ORAL THERAPY THAT MAY CHANGE THE WAY YOU TREAT PSORIATIC ARTHRITIS



- ◆ Proven efficacy in clinical trials vs. placebo¹
- ◆ Favourable safety profile with no increased risk of malignancy, serious infection, or tuberculosis vs. placebo, demonstrated in clinical trials^{1,2}
- ◆ Oral dosing¹
- ◆ No requirement for tuberculosis prescreening or any ongoing laboratory monitoring^{1,2}

INDICATION

Otezla, alone or in combination with Disease Modifying Antirheumatic Drugs (DMARDs), is indicated for the treatment of active psoriatic arthritis (PsA) in adult patients who have had an inadequate response or who have been intolerant to a prior DMARD therapy.¹



Prescribing Information: OTEZLA[®] (apremilast) 10mg, 20mg and 30mg film coated-tablets.

Refer to the Summary of Product Characteristics (SPC) before prescribing.

Presentation: 10mg, 20mg and 30mg film coated-tablets. **Indications:** Psoriatic arthritis: OTEZLA[®], alone or in combination with Disease Modifying Antirheumatic Drugs (DMARDs), is indicated for the treatment of active psoriatic arthritis (PsA) in adult patients who have had an inadequate response or who have been intolerant to a prior DMARD therapy. Psoriasis: OTEZLA[®] is indicated for the treatment of moderate to severe chronic plaque psoriasis in adult patients who failed to respond to or who have a contraindication to, or are intolerant to other systemic therapy including cyclosporine, methotrexate or psoralen and ultraviolet-A light (PUVA). **Dosage and administration:** Treatment with OTEZLA[®] should be initiated by specialists experienced in the diagnosis and treatment of psoriasis or psoriatic arthritis. The recommended dose of OTEZLA[®] is 30mg twice daily taken orally, morning and evening, approximately 12 hours apart, with no food restrictions. The film-coated tablets should be swallowed whole. To reduce risk of gastrointestinal symptoms, an initial dose titration is required according to the following schedule: Day 1: 10mg in morning; Day 2: 10mg in morning and 10mg in evening; Day 3: 10mg in morning and 20mg in evening; Day 4: 20mg in morning and 20mg in evening; Day 5: 20mg in morning and 30mg in evening; Day 6 and thereafter: 30mg twice daily. No re-titration is required after initial titration. If patients miss a dose, the next dose should be taken as soon as possible. If it is close to the time for their next dose, the missed dose should not be taken and the next dose should be taken at the regular time. During pivotal trials the greatest improvement

was observed within the first 24 weeks of treatment. If a patient shows no evidence of therapeutic benefit after 24 weeks, treatment should be reconsidered. The patient's response to treatment should be evaluated on a regular basis. Clinical experience beyond 52 weeks is not available in psoriasis. **Special populations:** Paediatric population: The safety and efficacy of apremilast in children aged 0 to 17 years have not been established. No data are available. Elderly patients: No dose adjustment is required for this patient population. Patients with renal impairment: No dose adjustment is needed in patients with mild and moderate renal impairment. The dose of apremilast should be reduced to 30mg once daily in patients with severe renal impairment (creatinine clearance of less than 30mL per minute estimated by the Cockcroft-Gault equation). For initial dose titration in this group, it is recommended that OTEZLA[®] be titrated using only the morning doses and the evening doses be skipped. Patients with hepatic impairment: No dose adjustment is necessary for patients with hepatic impairment. **Contraindications:** Hypersensitivity to the active substance(s) or to any of the following excipients: Microcrystalline cellulose, Lactose monohydrate, Croscarmellose sodium, Magnesium stearate, Polyvinyl alcohol, Titanium dioxide (E171), Macrogol 3350, Talc, iron oxide red (E172). The 20mg tablets also contain iron oxide yellow (E172). The 30mg tablets also contain iron oxide yellow (E172) and iron oxide black (E172). OTEZLA[®] is contraindicated in pregnancy and should be excluded before treatment can be initiated. **Special warnings and precautions:** Patients with rare hereditary problems of galactose intolerance, lapp lactase deficiency or glucose-galactose malabsorption should not take this medicinal product. OTEZLA[®] should be dose reduced to 30mg once daily in patients with severe renal impairment. Apremilast

may cause weight loss. Patients who are underweight at the start of treatment should have their body weight monitored regularly. In the event of unexplained and clinically significant weight loss, these patients should be evaluated by a medical practitioner and discontinuation of treatment should be considered. Women of childbearing potential should use an effective method of contraception to prevent pregnancy during treatment. Apremilast should not be used during breast-feeding. No fertility data is available in humans. **Interactions:** Co-administration of strong cytochrome P450 3A4 (CYP3A4) enzyme inducers, rifampicin, resulted in a reduction of systemic exposure of apremilast, which may result in a loss of efficacy of apremilast. Therefore, the use of strong CYP3A4 enzyme inducers (e.g. rifampicin, phenobarbital, carbamazepine, phenytoin and St. John's Wort) with apremilast is not recommended. In clinical studies, apremilast has been administered concomitantly with topical therapy (including corticosteroids, coal tar shampoo and salicylic acid scalp preparations) and UVB phototherapy. There was no clinically meaningful drug-drug interaction between ketoconazole and apremilast. Apremilast can be co-administered with a potent CYP3A4 inhibitor such as ketoconazole. There was no pharmacokinetic drug-drug interaction between apremilast and methotrexate in psoriatic arthritis patients. Apremilast can be co-administered with methotrexate. There was no pharmacokinetic drug-drug interaction between apremilast and oral contraceptives containing ethinyl estradiol and norgestimate. Apremilast can be co-administered with oral contraceptives. **Side effects:** The most commonly reported adverse reactions in Phase III clinical studies have been gastrointestinal disorders including diarrhoea and nausea. The other most commonly reported adverse reactions included upper respiratory tract infections, headache,

and tension headache. The most common adverse reactions leading to discontinuation during the first 16 weeks of treatment were diarrhoea, and nausea. The overall incidence of serious adverse reactions was low and did not indicate any specific system organ involvement. Prescribers should consult the summary of product characteristics in relation to other side-effects. **NHS list price:** £265.18 per 14 day titration pack; £550 per pack of 56 tablets (30mg). **Legal category:** POM. **Marketing authorisation numbers:** EU/1/14/981/001, EU/1/14/981/002 and EU/1/14/981/003. **Marketing authorisation holder:** Celgene Ltd, 1 Longwalk Road, Stockley Park, Uxbridge, UB11 1DB, United Kingdom. **Date of preparation:** January 2015. **Approval code:** UK-18140096.

Adverse events should be reported. Reporting forms and information can be found at www.yellowcard.mhra.gov.uk Adverse events should also be reported to Celgene Drug Safety Tel: 0800 238 9908; Fax: 0844 801 0468

References:
1. OTEZLA Summary of Product Characteristics available at www.medicines.org.uk
2. Mease PJ, et al. Poster 310 presented at the Annual Meeting of ACR/ARHP, San Diego, California, October 26-30, 2013.
Date of Preparation: February 2015 UK-18140071b



Results: Results are in progress and are due for dissemination in August 2015. Themes emerging relate to the occupational impact of living with arthritis; LMAP experience (content, education methods, and group-work experiences); self-management approaches (activity pacing, joint protection, relaxation techniques); and change process (enablers and barriers).

Conclusion: The LMAP was generally well received by all participants. Both positive and negative aspects of the programme were identified. Considerations for the facilitation of future LMAPs and arthritis self-management programmes are recommended.

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ABSTRACT 5 POSTER PRESENTATION

A survey of Irish Rheumatology Nurses examining clinical practice, professional behaviour and education needs

Author(s): Eileen Shinnors

Department(s)/Institution(s): Education & Research Centre, Our Lady's Hospice & Care Services

Aim/Introduction: With under half the recommended specialist and advanced rheumatology nursing roles in Ireland and best practice model of treating to target, it is imperative to demonstrate the value of Rheumatology CNS/ ANPs to lobby for an increase in these posts (IRNF 2014).

This survey demonstrates the key activities of rheumatology nurses nationally, utilising a tool previously validated by UK rheumatology nurses (Specialist Nursing Activity Profile SNAP) (Ryan et al, 2006).

Method: Approval was granted by Our Lady's Hospice & Care Services and the authors to use the tool. Following conversion from paper to online, it was emailed to all Irish Rheumatology Nursing Forum (IRNF) members, with a reminder 2 weeks later.

Results: Key findings include majority of respondents very confident counselling patients on Methotrexate (73%), calculating a DAS score (68%) and to a lesser extent performing a joint count (54%) and least of all 19% supporting patients with chronic pain. The majority of respondents' described monitoring patients on DMARDs (62.5%) and Biologics (68%) as a major part of their role with majority stating they never prescribe medications (72%) or give joint/ soft tissue injections (68%). A third were considering further post graduate study, 72% had undertaken rheumatology specific education.

Conclusion: Rheumatology nurses spend most of their time counselling and managing patients on DMARDs/ Biologics and providing psychological support. Despite a commitment from rheumatology nurses nationally to high quality care, development of services, audit and further education, almost half of those surveyed are still employed as RGNs.

ABSTRACT 6 POSTER PRESENTATION

"Shared" Decision Making?- two contrasting patient experiences

Author(s): Una Martin, Paula Dreelan, Shama Khan, Claire Sheehy

Department(s)/Institution(s): Rheumatology, University Hospital Waterford

Aim/Introduction: Involving patients in decision-making about medication is advocated as this has numerous benefits, including improved adherence, coping and higher patient satisfaction with health care. Matching patients' preferences to treatment options may improve adherence.

Method: We conducted a survey of views of patients who were all switched from intravenous (IV) to subcutaneous (S/C) Abatacept (ABA). They were not offered the option of remaining on infusion therapy. In 2015 when Tocilizumab (TOC) became available S/C, the patients were given the option to switch or remain on IV therapy. We repeated the same questionnaire.

Results: Of the TOC group, 9 of 30 opted to switch. 7/9 completed survey. 21 of 30 ABA completed the questionnaire. In the TOC group 1 of the 7 patients would revert back to IV. In the ABA group 6 of the 21 patients would opt to revert back to IV. The ABA switch group reported the interaction, support and guidance of nursing staff as the main benefit of IV route. The TOC groups preferred the less frequent administration when asked re IV benefits, but this did not make them want to revert. Both groups were comparable when it came to efficacy of both routes, and practical issues such as injection administration, sharps disposal and prescription collection.

Conclusion: While the numbers in this study are very small, it does reflect that certain patients depend on the nursing staff for provision of a supportive and secure environment. Lifestyle, control and comfort are important factors that should be considered in treatment decision plans as they may influence long term adherence.

ABSTRACT 7 POSTER PRESENTATION

Methotrexate Patient Information and Monitoring Booklet-Results from a National Pilot Study

Author(s): Una Martin

Department(s)/Institution(s): Department of Rheumatology, University Hospital Waterford

Aim/Introduction: Despite the fact that methotrexate is commonly prescribed for patients with Inflammatory Arthritis (IA), little patient educational material exists to support patients in making an informed decision about taking methotrexate.

Method: Following the development of combined Methotrexate (MTX) patient information and monitoring booklet, a national pilot study was conducted. Patients commencing MTX were asked to complete a questionnaire to ascertain their views about the booklet. The questionnaires included questions about content, language, usefulness, size, level of detail and risks / benefits of MTX. A total of 150 questionnaires were issued across six sites nationally.

ISR Spring 2015



Dr Claire Sheehy: Chair (start a.m. to lunch) and part of the Academic Team from University Hospital Waterford



Susan Murphy (PhD) from University Hospital Waterford – first speaker



Dr Nicola Ambrose – 2nd speaker



ISR Board officers, Frances Stafford, David Kane & Sinead Harney



Dr Donncha O'Gardaigh - 3rd speaker - from University Hospital Waterford and part of Academic Team



Dr Grainne Murphy (CUH); Dr John G Ryan (CUH); Dr Eamonn Molloy (SVUH) and Dr Maurice Barry (Connolly Hospital); with Dr Tom Nolan (GP – Kilkenny) sitting behind on the left



Dr Lorna Gallagher (AMNCH & TCD) – Young Investigator Award 2014 winner's presentation



ISR 2014 AGM



Results: A total of 30 questionnaires were returned .83% totally agreed that the booklet was easy to read and 62% found the language easy to understand. 58% totally agreed that the information about methotrexate was useful and 72% found the booklet helpful when starting methotrexate. Practical issues such as the size (100% totally agreed) and the combination of the information and monitoring in one were also received favourably (68.97% totally agreed). 55.5% totally agreed that the booklet explained the risk / benefit of methotrexate. Free text from patients also reported, that the booklet provided reassurance, simplicity of language and improved their confidence in taking methotrexate.

Conclusion: Patient information is an integral part of the patients' journey when they have a diagnosis of IA. The patient evaluation of the booklet has ensured that it is suitable for the target audience, is patient orientated and patient centred. The results of the pilot study will be incorporated in to the final document that will be incorporated into the MTX pathway for IA as part of the National Rheumatology Care Programme.

ABSTRACT 8 POSTER PRESENTATION

Review of a New Service: A Profile of Service Users Attending an Allied Health Professional Clinic on an Inflammatory Pathway

Author(s): Yvonne Codd, Rachel Burke, Stephanie Naramore, David Kane, Ronan Mullan

Department(s)/Institution(s): Rheumatology Dept., Naas General Hospital, Naas

Aim/Introduction: Rheumatology Allied Health Professional (AHP) services were established in XXXX General Hospital in December 2014 and the AHP Clinic commenced in April 2015. The AHP Clinic and the Inflammatory Arthritis Pathway were modelled on existing service provision in YYYY Hospital. The AHP team comprises of Rheumatology Nurse, Senior Physiotherapist (PT) and Senior Occupational Therapist (OT). The aim of this study was to identify the profile and needs of service users on presentation to the AHP clinic over the course of its first 3-months.

Method: Retrospective chart review was undertaken with all service users attending AHP clinic between April – July 2015. Approval was granted from XXXX General Hospital Ethics Committee. 18 charts were included in analysis.

| | Average (Range) |
|-------------------------------|--|
| DAS 28CRP (n=17) | 3.94 (0.91-6.93) |
| Rapid 3 Total Score (n=17) | 11.91 (0.5-26) |
| Fatigue Score (0-100) (n=17) | 42.3 (0-100) |
| Currently in Employment | 11 (retired: 4) |
| Work Instability Score (n=17) | 8 (1-23) |
| Hands and Feet Affected | UL: 3 LL: 1 UL & LL: 13 Spine and LL: 1 |
| Requiring Return Visits | Nursing (18), PT (18) OT(16) |

Results: More men (10) than women attended (8) with an average age of 50.27 (range 32-85 yrs)

Conclusion: The majority of service users required further AHP intervention post 1st visit. Many service users had significant symptoms and associated functional impairment. Findings of this profile study reiterate the early impact of IA and identify the role of an AHP clinic in early screening and interdisciplinary intervention from diagnosis to support positive outcomes.

ABSTRACT 9 POSTER PRESENTATION

The Development of a Reproductive Health Care Pathway in the Republic of Ireland

Author(s): Louise Moore¹, Patricia Minnock¹, Joan Lalor², Celine O'Brien³, Fionnuala McAuliffe³, Eamonn Molloy⁴, Oliver FitzGerald⁴, Douglas Veale⁴

Department(s)/Institution(s): RMDU, Our Lady's Hospice and Care Services, Harold's Cross, Dublin 6W¹
School of Nursing and Midwifery, Trinity College Dublin, Dublin 2²
The National Maternity Hospital, Holles Street, Dublin 2³
Saint Vincent's University Hospital, Elm Park, Dublin 4⁴

Aim/Introduction: It is acknowledged within the literature that for those women with rheumatic disease, good disease control is paramount at each stage of reproduction to ensure best outcome for both mother and baby. An interdisciplinary shared care approach to care is also advocated. A national study identified a discrepancy, among rheumatology clinicians (physicians/nurses), in relation to knowledge, medication management and care provided to women at each reproductive stage. This discrepancy has led to dissatisfaction amongst women with care provided by rheumatology clinicians. Furthermore, no care pathway existed within the Republic of Ireland, to guide clinician's practice in the management of this specific patient cohort. The need to develop a nurse led rheumatology reproductive health clinic (RHC) as well as a care pathway for use in clinical practice for patients with rheumatic disease at each reproductive phase was identified

Method: From April 2013 to March 2014, clinicians within the rheumatology department were asked to refer patients to the RHC with the ultimate aim to improve their pregnancy care and outcome. Care was provided by a CNS in conjunction with their consultant rheumatologist. Formalised partnership links were established with obstetric colleagues.

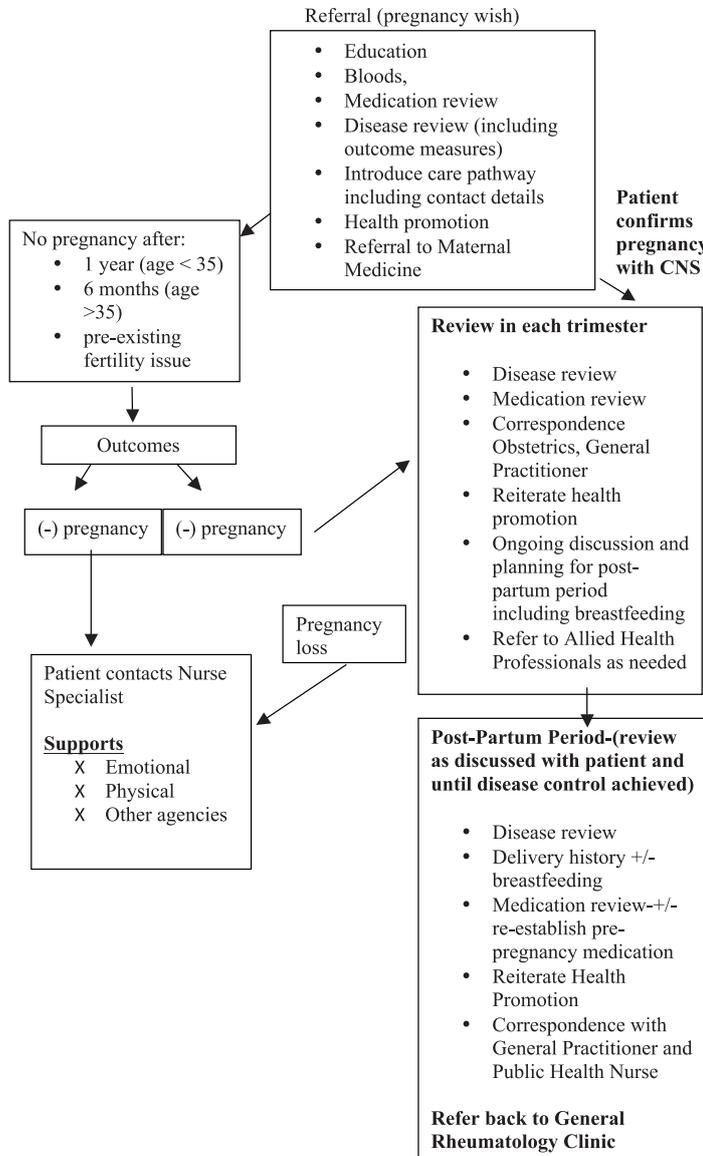
Results: The care pathway was developed from work with this specific cohort-Figure 1.

Conclusion: This pathway has been informed by the literature as well as clinical experience with this cohort of patients and provides a structured approach to care. Care for this cohort is multifaceted and requires a pragmatic approach from all clinician's involved. Work is ongoing to elicit patient satisfaction with this care pathway.



Figure 1: Nurse Led Rheumatology Reproductive Health Care Pathway

Figure 1: Nurse Led Rheumatology Reproductive Health Care Pathway



ABSTRACT 10 POSTER PRESENTATION

Plantaris muscle, its location and size in the region of the Achilles tendon: An observational cadaveric study

Author(s): Kirwan P^{1,2}, French HP², Duffy T³

Department(s)/Institution(s): ¹Physiotherapy Department, Connolly Hospital, Blanchardstown, Dublin 15

²School of Physiotherapy, Royal College of Surgeons in Ireland, Dublin 2

³Rheumatology Department, Connolly Hospital, Blanchardstown, Dublin 15

Aim/Introduction: Traditionally Plantaris has been considered of little clinical importance and absent in 8-20% of the population¹. Recent evidence indicates that it is present in 98-100% of the population and that it may have a contributing role

in Achilles tendinopathy² due to its close anatomical relationship.

The aim of this study was to establish whether Plantaris was present in a sample of cadaveric limbs, to establish its position in relation to the Achilles tendon and to conduct measures of its thickness and width.

Method: Forty eight cadaveric limbs which had been previously dissected were assessed. Plantaris was looked for in the region of the medial Achilles. If it could not be identified here, Gastrocnemius was reflected back to reveal Plantaris tendon beneath, and was then followed distally. All Plantaris tendon measurements were taken 2-6 cm from the Achilles insertion using a vernier caliper.

Results: Plantaris was present in all of the forty three limbs which were appropriate for assessment. Plantaris was positioned ventromedial to the Achilles tendon in 33 (77%) and medial to the Achilles in 9 (21%) of the limbs. The average width of the Plantaris tendon was 2.8mm (range 1.2-4.9mm) and its average thickness was 0.9mm (range 0.2-1.5mm).

Conclusion: Plantaris was present in all limbs in keeping with recent studies. This is the first known study, which measures Plantaris tendon in the region of the midportion Achilles. Future studies are planned to compare these measurements with tendinopathic plantaris tendons.

References:

Freeman et al. Clin Anat. 2008 21:178-181

Van Sterkenberg et al. J Anat. 2011 218(3):336-41

ABSTRACT 11 POSTER PRESENTATION

The Development of Physiotherapy-led Musculoskeletal Triage Services in Ireland

Author(s): A.Brennan¹, R. Breen², J. Ashton³, E. Callanan⁴, C. Farrell⁵, D. Moore⁶, P. Kenny⁷, D. Carey⁸, O. FitzGerald⁹

Department(s)/Institution(s): Departments of Physiotherapy¹, Orthopaedics⁶, Tallaght Hospital, Dublin. Rheumatology Programme, RCPI, Dublin². Department of Physiotherapy, Beaumont Hospital, Dublin³. Department of Physiotherapy, Merlin Park, Galway⁴. Department of Orthopaedics, Cappagh Orthopaedic Hospital, Dublin⁷. Orthopaedic Programme, RCSI, Dublin, HSE⁷, Dr Steevens Hospital⁸, Departments of Rheumatology, St. Vincents University Hospital, Dublin⁹

Aim/Introduction: In 2012, funding was approved for twenty-four Advanced Practice Physiotherapy (APP) posts in Ireland through the Clinical Strategy and Programmes Directorate of the HSE. These posts were to provide orthopaedic and rheumatology triage clinics across 16 hospitals throughout the country.

The aims of these clinics were to reduce the waiting time for outpatient consultation for orthopaedic and rheumatology patients; to establish a diagnosis and triage patients along the most appropriate care pathway according to their diagnosis.

Method: Initially 18 APPs were recruited in 2012 and currently there are 22.5 in post nationally. Guidelines regarding inclusion for attendance at these clinics were disseminated to APPs



recruited to posts. Clinical governance for APP clinics is provided by either a consultant orthopaedic surgeon or a consultant rheumatologist who provide support with clinical diagnosis; with the ordering of investigations and with management of patients as appropriate.

Results: From January 2012 to May 2015 48,279 patients have been removed from orthopaedic and rheumatology waiting lists nationally. In orthopaedic clinics APPs reviewed 33,092 new patients and discharged 25,917 (78%); in rheumatology clinics APP's reviewed 7,550 new patients and of this 5,417 (72%) were discharged following their review.

Conclusion: Advanced Practice Physiotherapist's can assist in the management of orthopaedic and rheumatology waiting lists. These services provide patients with early access for a specialist opinion and management and therefore prevent chronicity of symptoms. It can be hypothesized that prevention of chronicity would result in a reduction in the use of health care resources by this subgroup of patients.

ABSTRACT 12 POSTER PRESENTATION

The development of RAISE (Rheumatoid Arthritis Information Support and Education) application for both iOS and Android platforms

Author(s): O'Loughlin C, Nolan M, Norris L, O' Shea F, Doran, M

Department(s)/Institution(s): Rheumatology Department, St. James's Hospital, Dublin 8

Aim/Introduction: The RAISE (Rheumatoid Arthritis Information Support and Education) application was developed with the support of Arthritis Ireland to provide knowledge to people living with Rheumatoid Arthritis. The RAISE application was developed using the expertise of the Rheumatology team in St James's Hospital. It was designed as a self-management tool for people living with RA.

Method: An unrestricted grant from Pfizer was obtained. A digital marketing company, Publicis D, was approached to design and build the RAISE application. Several meetings took place over a six month period between Publicis D and the Rheumatology team in St James's Hospital during which the purpose, content and functionality of the RAISE application were agreed. Arthritis Ireland was invited to review the content and functionality of the application. An estimated time of completion of the RAISE application was decided.

Results: The RAISE application is structured around the content provided. The content in the app includes information such as disease diagnosis, symptoms, medications, diet, exercise, smoking, flare management, work and RA, exercise videos, a relaxation audio, progress monitors and stories written by people living with RA. A design was created for the RAISE app which included a colour palette and iconography for use within the app. The RAISE app was completed and is due for launch in Summer 2015.

Conclusion: It is hoped that the RAISE app will be a useful tool for those living with RA in terms of increasing self-efficacy and

improving knowledge. The provision of information and the availability of resources within the app such as exercise videos, a relaxation audio and pain/activity diaries will facilitate empowerment of people with RA over their disease and assist them to better cope with the altering stages of their disease.

ABSTRACT 13 POSTER PRESENTATION

The landscape of Rheumatology Occupational Therapy in Vocational Rehabilitation in Ireland

Author(s): Corcoran, O¹; Fitzgerald, T²; Codd, Y³; Somerville, S⁴; Brownlee, J⁵; Verling, N⁶; McCausland, K⁷; Meehan, L⁸; Flattery, V⁹; Duggan, E¹⁰

Department(s)/Institution(s): Occupational Therapy (OT) dept, University Hospital Waterford¹; OT dept, St. Vincent's University Hospital²; OT dept, Naas General Hospital³; OT dept, Tallaght Hospital⁴; OT dept, Our lady's Hospice, Harold's Cross⁵; OT dept, South Infirmary Hospital, Cork⁶; OT dept, Our Lady's Hospital, Navan⁷; OT dept, Our Lady's Hospital, Manorhamilton⁸; OT dept, University Hospital Galway⁹; Workright Consultants¹⁰

Aim/Introduction: Preventing work disability/instability are key objectives of the Rheumatology Clinical Care Programme. Vocational rehabilitation (VR) is outlined in the model of care. VR has potential to reduce the risk, cost and negative human effects of work disability^{1,2,3}. Occupational Therapy (OT) is the key profession to provide VR^{4,5,6}. This study aims to examine rheumatology OT services and practice in VR in Ireland.

Method: A 32 question survey was developed using monkey survey by the AOTI RMD and chronic pain advisory group investigating current practice in provision of VR services. Questions focused on how many therapists provide VR, the types of interventions provided, barriers and issues experienced. This survey was circulated via the group to its rheumatology OT members. The data was collected and analysed.

Results: Currently 11.5 w.t.e rheumatology OT posts nationally. A response rate of 95.6% (N=11). Demographics 91.67% Female: 8.33% Male. 90.09 % working in acute, 9.09 % in rehabilitation. 66.7 % had experience in VR. Referral sources to OT were consultant at 90.9%, physio, and nursing at 72.7%. Main reason for referral was for splinting at 90.9% with 63.64 % of referrals being for VR. Table 1 outlines the types of VR interventions provided by OT's. 63.6% provide VR services but limited with barriers to services identified and a high level of unmet need.

Conclusion: VR is being addressed within current OT services but there is inequity in service delivery due to insufficient staffing levels, in-patient demand, waiting list pressure, limited resources and time. Results will be incorporated into the business case for OT posts as part of the rheumatology clinical care programme.

References:

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2: Franche, R., Cullen, K., Clarke, J., Irvin, E., Sinclair, S. and Frank, J. (2005) 'Workplace-based return-to-work interventions: a systematic review of the quantitative literature', *Journal of Occupational Rehabilitation*, 15(4), 607-631.

3: Briand *et al* 2008 Briand, C., Durand, M. J., St-Arnaud, L. and

Table 1:

| Answer Options | Always | Very Often | Sometimes | Almost Never | Never | No of responses |
|--|--------|------------|-----------|--------------|--------|-----------------|
| Supported (graded) return to work after sick leave | 0% | 11% | 44% | 33% | 11% | 9 |
| Work station modification | 0% | 25% | 62.50% | 0% | 0% | 8 |
| Posture/work positioning | 50% | 0% | 50% | 0% | 0% | 8 |
| Alternative equipment | 11% | 22% | 55.50% | 11% | 0% | 9 |
| Access within the workplace | 0% | 22% | 33% | 22% | 22% | 9 |
| Changes to duties | 0% | 33% | 33% | 33% | 0% | 9 |
| Changes to shift patterns | 0% | 44% | 33% | 22% | 0% | 9 |
| Pacing | 67% | 11% | 22% | 0% | 0% | 9 |
| Task rotation | 55.50% | 22% | 11% | 11% | 0% | 9 |
| Splinting | 0% | 87.50% | 12.50% | 0% | 0% | 8 |
| Exercise at work | 0% | 33% | 44% | 11% | 11% | 9 |
| Relaxation/stress management | 22% | 22% | 33% | 11% | 11% | 9 |
| Injury prevention | 11% | 22% | 44% | 11% | 0% | 9 |
| Joint protection | 55% | 33% | 11% | 0% | 0% | 9 |
| Fatigue management | 44% | 33% | 11% | 11% | 0% | 9 |
| Disclosure (advice/support to discuss work issues with employer) | 22% | 22% | 44% | 0% | 11% | 9 |
| Work site visits | 0% | 11% | 22% | 33% | 33% | 9 |
| Liaison with line managers | 0% | 33% | 11% | 22% | 33% | 9 |
| Disability rights at work information & advice | 12% | 50% | 12% | 0% | 25% | 8 |
| Referral to other services | 11% | 33% | 55.50% | 0% | 0% | 8 |
| Referral to physio/healthy lifestyle programmes | 0% | 37.50% | 37.50% | 12.50% | 12.50% | 9 |
| Referral to counselling | 0% | 62.50% | 12.50% | 12.50% | 12.50% | 9 |

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4: World Federation of Occupational Therapists 2012; World Federation of Occupational Therapists (2012) 'Position Statement: Vocational Rehabilitation' [online], available: <http://www.wfot.org/ResourceCentre/tabid/132/did/503/Default.aspx> [accessed 2nd June 2012].

5: Lee, J. and Kielhofner, G. (2009) 'Vocational intervention based on the model of human occupation: a review of evidence', *Scandinavian Journal of Occupational Therapy*, 13(1), 1-14.

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ABSTRACT 14

POSTER PRESENTATION

'Do physiotherapists document weight and discuss the influence of weight on pathology in patients with Osteoarthritis?'

Author(s): A.Brennan¹, M. McGrath¹, P. Robinson¹, M. Fitzgerald¹, H.Nolan¹, E. Sheehy¹, A. Curley¹, E. Lee Moloney¹, J. Lanigan¹, C. Kelleher¹, R. McCollum C. Ni She¹

Department(s)/Institution(s): Department of Physiotherapy¹, Tallaght Hospital, Dublin 24

Aim/Introduction: There is a strong association between increased body weight and osteoarthritis (OA). The NICE(2014) and ACR(2012) guidelines strongly recommend that patients with OA consider weight loss if overweight.

The aim of this audit was to investigate if physiotherapists treating patients with knee and lumbar-spine OA:

- i) Documented patients weight
- ii) Discussed the role of increased weight on OA

Method: An audit of seventy physiotherapy charts of patients attending physiotherapy in 2013 found that 15percent (knee) and 11percent (lumbar-spine) had their weight documented. The role of increased weight was discussed with 15percent (knee) and 11percent (lumbar-spine). A 'BMI station' was set up to use with patients. A lifestyle education class was established. In 2015 a re-audit was carried out on patients who attended for physiotherapy in 2014.

Results: Seventy physiotherapy charts were randomly selected and included. The median age was 64years (knee) and 53years (lumbar-spine). Of these 7 were male and 23 female (knee), 17 were male and 19 female (lumbar-spine). Of these, 38percent (knee) and 31percent (lumbar-spine) had their weight documented. The role of increased weight was discussed with 19percent (n=7) (knee) and 22percent (n=8) (lumbar-spine).

Conclusion: Physiotherapists have improved in relation to documenting weight and discussing the role of increased weight on OA since the previous audit. However, it is evident that they do not regularly

document weight in patients with knee and lumbar-spine OA or document if they advised patients regarding the role of weight management for the treatment of OA. Further strategies to address this are necessary.

ABSTRACT 15

POSTER PRESENTATION

Advanced practice musculoskeletal physiotherapists in Rheumatology- a national report of the 2014 data

Author(s): Ashton J¹, Breen R², Brennan A³, Callanan E⁴, Farrell C⁵, Moore D⁶, Kenny P⁷, Carey D⁸, O. FitzGerald⁹

Department(s)/Institution(s): Department of Physiotherapy, Beaumont Hospital, Dublin¹. Rheumatology Programme, RCPI, Dublin². Department of Physiotherapy, Tallaght Hospital, Dublin³. Department of Physiotherapy, Merlin Park, Galway⁴. Orthopaedic Programme, RCSI, Dublin⁵. Department of Orthopaedics, Tallaght Hospital, Dublin⁶. Department of Orthopaedics, Cappagh National Orthopaedic Hospital, Dublin⁷. QI Division, HSE, Dr. Steven's Hospital, Dublin⁸. Department of Rheumatology, St. Vincent's University Hospital, Dublin⁹

Aim/Introduction: Research studies have supported the role of Advanced Practice Physiotherapists (APP's) acting as first contact practitioners in the management of musculoskeletal



(MSK) patients. In 2012, funding was approved for 24 APP posts in Ireland through the HSE. These posts provide orthopaedic and rheumatology triage clinics across 16 hospitals. This report aims to present the data collected on the throughput of rheumatology patients seen by the APPs in 2014.

Method: 13 sites provide MSK triage through rheumatology clinics. While each post has a target of seeing 1,000 patients per year it has been reported that APP's see a ratio of 5:1 orthopaedic to rheumatology patients.

Data was collected monthly and reported to the rheumatology clinical care programme. The standardised proforma included details regarding waiting time, pain site, APP and consultant input and discharge status. Descriptive data was analysed using a Microsoft® Excel package.

Results: 2,177 new and 530 return rheumatology patients were seen nationally. Regarding new patients 35.2% (n=766) had multiple pain sites, 58.6% (n=1275) were seen within 6 months of referral and 20.9% (n=457) had imaging ordered. 40.1% (n=873) were referred for physiotherapy. 63.3% (n=1378) were discharged from the APP clinic. 7.3% (n=159) were seen by the consultant on the day of their appointment and 9.2% (n=201) required on-going rheumatology follow up.

Conclusion: APPs have been effective in managing MSK referrals within a rheumatology setting. There was a high rate of discharge back to the referring doctor and low rate of ordering imaging and consultant input required.

Reference:

1. Desmeules et al (2012) Advanced practice physiotherapy in patients with musculoskeletal disorders: a systematic review. *BMC Musculoskeletal Disorders*. 13: 107-128.

ABSTRACT 16 POSTER PRESENTATION

Work-related disability and musculoskeletal disorders in secondary care: A growing problem in Ireland

Author(s): Ashton J¹, O'Connell P², McLaughlin, J³ and Lennon O³

Department(s)/Institution(s): 1. Physiotherapy dept, Beaumont Hospital
2. Rheumatology dept, Beaumont Hospital
3. UCD School of Public Health, Physiotherapy and Population Science

Aim/Introduction: Musculoskeletal disorders (MSDs) present with significant work-related disability (WRD). The aims of this study were to:

- i) Profile patients attending a secondary care MSD clinic in Ireland in relation to WRD and employment status.
- ii) Examine trends between patient demographic and MSD characteristics and HRQoL with WRD indices.

Method: Beaumont Hospital Ethics Committee approved this cross sectional study (reference: 12/31). Consenting adults fulfilling eligibility criteria including employment in the recent past, pre-retirement status and referral by GP or hospital consultant to an Orthopaedic or Rheumatology MSD clinic were surveyed between June 2012 and January 2013. Demographic

details, clinical and work related indices were obtained. Participants completed self-reported questionnaires including the EuroQol 5D, a numerical rating scale (NRS) for pain (0-10) and a condition-specific disability scale. SPSS was used to analyse descriptive statistics (mean (sd) /frequency (%)) and correlation co-efficients, independent t-tests and chi²-tests were used in the comparative analysis between participant remaining in employment and those no longer working.

Results: 65 patients (mean age 46 years (±10.57); 55% male) were recruited to the study. Linear trends between recent unemployment and pain and disability indices were noted (r=-0.735; r=-0.677 respectively). Those with higher pain reports also tended to have lower HRQoL. Significant differences were noted in pain (t=0.42; p=0.022), disability (t=3.96; p<0.001) and injury-related onset (Chi²=5.98; p=0.014) in unemployed when compared with employed participants.

Conclusion: Individuals with high self-reported pain and disability indices may require earlier, targeted intervention to support and maintain them in the workforce.

References:

Abasolo L, Lajas C, Leon L, Carmona L, Macarron P, Candelas, Blanco M and Jover JA. Prognostic factors for long-term work disability due to musculoskeletal disorders. *Rheumatol Int* 2012; 32: 3831-3839
Arthritis Ireland. Fit for Work Ireland Position Paper. Dublin: 2013

ABSTRACT 17 POSTER PRESENTATION

The Effect of a combined group Aquatic Physiotherapy and Multidisciplinary Education Programme on patients with Fibromyalgia Syndrome – a Pilot study

Author(s): M. McGrath, S. Somerville, E. Conlon, E. Dee, S. O'Driscoll, A. Brennan

Department(s)/Institution(s): Physiotherapy Department, Tallaght Hospital

Introduction: Multidisciplinary Team (MDT) management of Fibromyalgia Syndrome (FMS) is optimal. Exercise is an integral treatment modality to improve symptoms and quality of life in patients with FMS (1). Studies have shown that pool-based exercise can produce significant improvements in this patient group (2-4). MDT Education is essential to effective FMS management (5).

Aim: To determine if a four-week combined group Aquatic Physiotherapy (AP) and MDT education programme for patients with FMS improved levels of anxiety, depression, self-efficacy and physical function.

Method: The existing FMS pathway for patients was run by physiotherapy only and the AP component was individual based. The pathway was revised to include group AP coupled with an MDT education programme. Outcome measures were taken pre and post the programme. The HADs, FIQ, NRS for self-efficacy and 5 times repeated sit-to-stand were used.



Results: Five people have completed the programme to date. All patients were female, average age was 41 years (range 22-53). Table 1 outlines pre and post programme data. No improvement in FIQ, anxiety or self-efficacy scores was detected. The depression score reduced from mean of 7.4 to 5.4. The repeated sit-to-stand improved from a mean of 16.648sec to 13.692sec.

Conclusion: A 4 week combined group AP and MDT education programme can improve levels of depression and functional ability in patients with FMS. Further data is being collected to display these effects in larger numbers.

**Table 1:
Pre and Post Programme Outcome Results Scores**

| | Pre-FIQ | Pre-Anxiety | Pre-Depression | Pre-Self Efficacy | Pre-5 STS | Post-FIQ | Pre-Anxiety | Pre-Depression | Pre-Self Efficacy | Pre-5 STS |
|-------|-----------|-------------|----------------|-------------------|-----------|-----------|-------------|----------------|-------------------|------------|
| Mean | 32 | 9.6 | 7.4 | 7.2 | 16.6 | 38 | 10.6 | 5.4 | 6.4 | 13.7 |
| Range | 10.8-47.8 | Mar-14 | 01-Oct | 05-Oct | 7.3-28.8 | 14.2-64.6 | May-20 | 1-8 | 4-10 | 7.19-20.87 |

ABSTRACT 18 POSTER PRESENTATION

To explore the beneficial effects of a dedicated CNS/RNP (Registered Nurse Prescribers) Methotrexate Clinic

Author(s): O'Loughlin, C, Doran, M, O' Shea, F

Department(s)/Institution(s): Rheumatology Department, St. James's Hospital, Dublin 8

Aim/Introduction: Close monitoring of patients with inflammatory arthritis to optimise treatment, with frequent dose adjustment of DMARDs such as Methotrexate (MTX) is the cornerstone of the EULAR/ACR Treat to Target recommendations. The CNS/RNP MTX clinic was set up to optimise disease control in keeping with Treat to Target guidelines, to improve patient safety and to improve efficiency of services provided to patients.

Method: An algorithm and clinic protocol was devised in consultation with the Rheumatology Consultants. Approval was required from Pharmaceuticals and Therapeutics in SJH via submission of the Collaborative Practice Agreement (CPA). Each patient received two appointments with the CNS within a four month period where a full clinical assessment including a DAS/HAQ was performed. Bloods were checked for any abnormalities before the dose of Mtx was escalated.

Results: The first clinic commenced on June 2014. To date 45 patients have been reviewed in the clinic (17 men, 28 women). There have been 82 clinic visits. Initiation dose of MTX is 10mg, 91% of patients had their dose escalated to 15mg, 26% of patients had their dose escalated further (<15mg). MTX was discontinued in 6.6% of pts. 71% of pts had moderate active disease (DAS >3.2) at baseline dropping to 24% at their final assessment.

Conclusion: The CNS provided MTX clinic has successfully been initiated in our institution. It has resulted in 82 clinics visits (that otherwise would have had to occur in the doctor clinic). In general MTX was well tolerated in this cohort due to close monitoring.

ABSTRACT 19 POSTER PRESENTATION

A Rheumatology nurse led initiative: Transitioning from a paper-based DMARD blood monitoring service to an electronic paperless service

Author(s): McConnell, K.

Department(s)/Institution(s): Rheumatology Department, St James's Hospital, Dublin 8

Aim/Introduction: The rheumatology blood monitoring clinic in St. James's Hospital (SJH) monitors the blood test results of patients receiving disease modifying anti rheumatic drugs (DMARDs). Laboratory results are available on the SJH Electronic Patient Record (EPR) system. Traditionally, all results were transcribed by the nurse in patient specific 'Rheumatology Record Books'. The nurse liaised with the Registrar concerning abnormal results. Advised interventions were documented (i.e. reduction in medication dose, repeat blood tests) in the patient record book. Blood test results are sent to an EPR collective results pool where the Registrar endorses results. Therefore, potential duplication was occurring as both the nurse and Registrar were reviewing the blood test results for the same cohort of patients. Thus, it was deemed necessary to update the workings of the clinic to enhance productivity and transparency.

Method: Blood results within acceptable limits are now endorsed by the rheumatology staff nurse via the EPR. The nurse has the facility to directly refer abnormal blood results to relevant team members for review via use of the EPR emailing service. All such referrals are directly traced and recorded to the patient's record. Development of a designated 'DMARD blood monitoring clinic' form allows relevant interventions be recorded to the patient's record.

Results: Patient record books have been replaced by a paperless system which facilitates the recording of all interventions related to blood monitoring on the EPR.

Conclusion: Utilising the EPR system effectively contributes to enhanced work place productivity, patient safety and increased communication and accountability between all team members.

ABSTRACT 20 POSTER PRESENTATION

Increasing Physical Activity in Ankylosing Spondylitis (INPACT-AS): Protocol for a Physical Activity Behaviour Change Intervention

Author(s): O'Dwyer, T¹; Monaghan, A¹; Moran, J¹; O'Shea, F²; Wilson, F¹

Department(s)/Institution(s): ¹ School of Medicine, Discipline of Physiotherapy, Trinity College, Dublin
² Department of Rheumatology, St. James's Hospital, Dublin 8

Aim/Introduction: Despite exercise being a key component of the management of ankylosing spondylitis (AS), fewer than half of adults with AS meet PA recommendations [1]. Awareness of national guidelines for PA participation among rheumatic cohorts is low [2]. The INPACT-AS trial aims to explore the feasibility and effectiveness of a PA behaviour change intervention in adults with AS.



Method: A single-blind, randomised controlled trial is currently underway. Forty adults with a diagnosis of AS and on stable pharmacological management were recruited through rheumatology clinics and patient support groups. Individuals with comorbidities limiting PA were excluded. Participants were randomised to either an intervention or a control group. Participants in the intervention group will have an initial consultation with a physiotherapist aimed at optimising PA. Over the subsequent twelve weeks, participants will be supported through either in-person or phone follow-up sessions. Weekly reminders of PA goals will be sent electronically. The control group will continue with their existing management strategies. Outcomes will be measured at baseline, post-intervention, and at a three month follow-up. The primary outcome measure will be free-living PA measured by accelerometry. Secondary outcomes will include measures of disease activity, physical function, quality-of-life, self-efficacy and attitudes towards exercise. A comprehensive battery of physical fitness tests will also be administered.

Results: The INPACT-AS trial is currently underway, with preliminary findings expected autumn 2015.

Conclusion: It is hypothesised that a PA behaviour change intervention, delivered through individually tailored consultations, will help increase PA level of adults with AS.

[1] O'Dwyer T, O'Shea F, Wilson F. THU0636-HPR Significantly Reduced Physical Activity in Adults with Ankylosing Spondylitis: A Cross-Sectional Controlled Study. *Annals of the Rheumatic Diseases*. 2015;74:1321.

[2] O'Dwyer T, Rafferty T, O'Shea F, Gissane C, Wilson F. Physical activity guidelines: is the message getting through to adults with rheumatic conditions? *Rheumatology (Oxford)*. 2014;53:1812-7.

The full study protocol is registered at ClinicalTrials.gov (NCT02374502).

ABSTRACT 21 POSTER PRESENTATION

Increasing Physical Activity in Ankylosing Spondylitis (INPACT-AS): Preliminary Results of a Randomised Controlled Trial

Author(s): O'Dwyer, T¹; O'Shea, F²; Monaghan, A¹; Moran, J¹; Wilson, F¹

Department(s)/Institution(s): ¹ School of Medicine, Discipline of Physiotherapy, Trinity College, Dublin
² Department of Rheumatology, St. James's Hospital, Dublin 8

Aim/Introduction: The INPACT-AS trial is a single-blind, parallel-group randomised controlled trial exploring the effects of a physical activity (PA) behaviour change intervention among adults with ankylosing spondylitis (AS). Preliminary results are presented below.

Method: Adults with AS (on stable pharmacological management) were eligible for participation. Individuals with comorbidities limiting PA were excluded. Participants were randomised to an intervention or a control group. Over a twelve week period, the intervention group participated in individual consultations with a physiotherapist, with the aim of optimising

habitual PA. The control group continued with their existing management strategies. Demographic data and clinical questionnaires were assessed at baseline and upon conclusion of the intervention. These included the Bath AS Disease Activity Index (BASDAI), the Bath AS Functional Index (BASFI) and the AS Quality-of-Life questionnaire (ASQoL). ActiGraph GT3x accelerometers recorded PA during waking hours over one week.

Results: Preliminary results of twenty participants (7 females) randomised to the intervention group are reported. Mean age was 38.9 years (SD 7.6). Mean symptom duration was 17.7 years (SD 9.5). Table 1 summarises accelerometry results. A significant increase in health-enhancing PA was observed post-intervention. At baseline, mean BASDAI was 3.4 (SD 1.6) and median BASFI was 1.4 (IQR 2.8); these were unchanged post-intervention. ASQoL score was significantly improved post-intervention [Median (IQR) pre: 5.0 (4.0), post: 2.0 (5.0); Wilcoxon Signed-Rank Test: $p = .013$].

Conclusion: Preliminary analysis suggests that a PA behaviour change intervention, delivered through individually-tailored consultations, significantly improved quality-of-life and health-enhancing PA levels of adults with AS.

Table 1 Habitual physical activity pre- and post-intervention in the INPACT-AS trial

| Variable ^a | Intervention Group | | <i>p</i> -value ^b |
|-------------------------------------|--------------------|---------------|------------------------------|
| | Pre (n = 19) | Post (n = 16) | |
| Sedentary activity | 3810 (644) | 3652 (503) | 0.4 |
| % Sedentary time | 65.0 (10.1) | 64.5 (9.4) | 0.93 |
| Light activity | 1788 (506) | 1745 (494) | 0.35 |
| Moderate-to-vigorous activity † | 231 (321) | 309 (270) | 0.007 |
| PA _{BOUTS} † | 119 (235) | 184 (165) | 0.013 |
| Meeting PA guidelines, <i>n</i> (%) | 8 (42.1) | 11 (68.8) | |

^a Minutes per week, expressed as mean (SD) unless otherwise stated:

† Median (interquartile range)

^b Paired *t*-test, Sign test or as appropriate.

Abbreviations - PA_{BOUTS}: physical activity performed at moderate- and/or vigorous-intensity lasting a minimum of 10 minutes

ABSTRACT 22 POSTER PRESENTATION

Developing an 8-week, Hospital Outpatient, Interdisciplinary, Rehabilitation Protocol using Acceptance & Commitment Therapy for people with Chronic Pain attending Rheumatology Services

Author(s): Noirin Nealon Lennox, Helen McGrath, Catherine Quinn, Siobhan O'Neill & Sam Murphy

According to figures from Clinical Rheumatology, chronic musculoskeletal pain affects between 13.5 per cent and 47 per cent of the general population (Cimmino, 2011). Results from a survey of people with chronic pain carried out in Ireland, reported that 15 per cent met the criteria for clinically relevant depression (Rafferty et al 2011). Acceptance and Commitment Therapy (ACT) has been found to increase physical functioning and reduce distress amongst people with chronic pain who attended group based ACT, interdisciplinary Pain Rehabilitation Programmes (Hann & McCracken 2014).



There appears to be a complete absence of psychosocial support for those suffering with Chronic Pain in the Midwest region of Ireland. The University Limerick Hospitals group is currently aiming to establish a Pain Rehabilitation Service. The aim of the present study is to develop an 8-week clinical protocol for this service, based on the 6 processes of ACT. These processes include cultivating contact with the present moment, focusing on acceptance as opposed to struggling with pain and facilitating individuals to live a more meaningful life despite any barriers.

Methods: Reviews of clinical protocols in similar settings were carried out, site visits to Pain Rehabilitation Programmes were conducted and intensive training in ACT was undertaken in order to develop the clinical protocol for this service in its unique setting.

Discussion: Future quantitative analyses will evaluate the efficacy and effectiveness of this intervention.

ABSTRACT 23 POSTER PRESENTATION

Benefit of using an electronic patient record across two sites and by all members of the multidisciplinary team

Author(s): Stephanie Naramore, Ronan Mullan, David Kane

Department(s)/Institution(s): Rheumatology Department Naas General Hospital

Introduction: Naas General Hospital started a Rheumatology service in July 2014 in conjunction with the Rheumatology service in Tallaght Hospital. Both services are utilising the CELLMA electronic patient record.

Aim: To highlight the effectiveness and efficiency of using an electronic patient record across two sites.

The electronic patient record facilitates the sharing of patient information through health information exchange. Patient safety is a fundamental principle of CELLMA and all areas of the programme are auditable. This system is utilised in both hospitals by all members of the multidisciplinary team (MDT) involved in caring for patients with rheumatology disease, including medical, nursing, physiotherapy, occupational therapy and clerical.

CELLMA allows for continuity of care across both sites, providing immediate access to accurate information about patients health and medical history. Patient cases can be reviewed across both sites and queries dealt with in a timely manner between all members of the MDT. Having access to patients medical information allows for more informed decision making and helps to ensure more effective communication, leading to a better patient experience and improved patient outcomes.

In the out-patient setting, General Practitioner letters are generated on the day patients are reviewed, this in turn leads to more efficient continuity of care.

Conclusion: The electronic patient record has provided a safe and effective way of allowing a Rheumatology service to run efficiently between two hospital sites thus overcoming the problems of shared care across two sites and ensuring an integrated approach to patient care.

ABSTRACT 24

POSTER PRESENTATION

A Retrospective Analysis to Profile Employment and Work Stability in Service Users Attending an Allied Health Professional Clinic on an Inflammatory Arthritis Pathway

Author(s): Yvonne Codd, Susan Somerville, David Kane, Ronan Mullan

Department(s)/Institution(s): Occupational Therapy Naas General Hospital, Occupational Therapy Tallaght Hospital

Aim/Introduction: Health benefits of engagement in employment are well documented (Waddell & Burton, 2006). Inflammatory arthritis (IA) correlates with high work disability; 40% with rheumatoid arthritis (RA) exit the work-force within 5 years of diagnosis (Bevan et al 2009). Early intervention is recognised as key to supporting work ability (Codd et al, 2010, COT 2008). This study profiled employment and work stability in service users (SU) on presentation to an Allied Health Professional (AHP) Clinic on an IA pathway.

Method: Retrospective chart review was completed of SU (n=47) attending 1st appointment at an AHP Clinic on an IA pathway across 2 hospital sites (from which ethics were obtained). Data was collected over 3 months, April –July 2015

Results: 62% (n=29) were in employment and diversity of occupations was noted. N=5 did not complete the WIS. Analysis of WIS scores highlight that 54% (n=13) obtained a score in the medium-high risk range. N=12 achieved a low risk score of which n=3 were borderline medium risk. N=9 of those not working wished to return to employment/study.

Conclusion: Findings profile levels of work instability with this population at an early stage in disease trajectory and identify occupational therapy (OT) need to support work ability and provide timely intervention to maintain SU paid employment. Profile highlights need for OT in 19% of SU not in employment. Findings reiterate early impact of IA on employment and identify therapy needs within this population. Early vocational screening and intervention is recommended from diagnosis to support positive employment outcomes.

References:

- Bevan, S., McGee, R. and Quadrello, T. (2009) *Fit For Work? Musculoskeletal Disorders and the Irish Labour Market*, London: The Work Foundation.
- Codd, Y., Stapleton, T., Veale, D.J., FitzGerald, O. and Bresnihan, B. (2010) 'A qualitative study of work participation in early rheumatoid arthritis', *International Journal of Therapy and Rehabilitation*, 17(1), 24 -33.
- College of Occupational Therapists (COT). (2008) *The College of Occupational Therapists' Vocational Rehabilitation Strategy*, London: COT.
- Waddell, G. and Burton, A. (2006) *Is work good for your health and well-being? 2006*, London: TSO (The Stationary Office).



ISR Life time Achievement Award

Dr Aubrey Bell

formerly at Musgrave Park Hospital, Belfast

MB 1976, Undergrad prizes, MRCP (UK) 1981, MD (thesis) 1984, FRCP (Ed, Lond) 1994

Research Fellow University Edinburgh under George Nuki 1981-2

Consultant Rheumatologist, Belfast HSC Trust and Senior Lecturer in Rheumatology at Queen's University 1987-2012
Main clinical interests have been in lupus, autoimmune rheumatic diseases and musculoskeletal ultrasound, with related research interests. Directed the Lupus Clinic at the Belfast Trust and NI Lupus Research Group. Scientific publications encompass laboratory and clinical aspects of Lupus, RA and related disorders.

Educational Interests: Past NICPMDE Director in Rheumatology; initiated the first Northern Ireland Regional SPR Rheumatology Training Programme 1996-2002

Member Royal College (London) Rheumatology SAC Undergraduate Education. Established first integrated undergraduate musculoskeletal course at Queen's University. Head of assessment 3rd year Medicine

Previously President ISR, Member: Association of Physicians of Great Britain and Ireland, Corrigan Club. Served on various committees on BSR, ARC, and Arthritis Care. Patron of Lupus UK (NI)

Served on Editorial Board of Annals of Rheumatic Disease.



EFSUMB Awards 2015



At the presentation of the certificates to Michelle & Claire are (Left to right) Prof David Kane, Dr Adrian Pendleton, Dr Allister Taggart, Dr Gary Wright and Dr Andrew Cairns.

Drs Michele McHenry and Claire Riddell received their level 1 EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) certification at the 2015 ISR Belfast Ultrasound Course. The ISR Ultrasound Accreditation committee met on March 27th and reviewed applications from 11 successful candidates (all applications received were approved, 10 at Level 1 and one at Level 2).

This is a major step in formalising the training of musculoskeletal ultrasound in Ireland and Musgrave Park Hospital in Belfast has recently been recognised as a EULAR Training Centre for Musculoskeletal Ultrasound.

Arthritis Ireland Research - Ironman Dublin



Professor Doug Veale on Sunday September 6th 2015 finished the first ever Dublin Ironman in 6hr 17 mins and 13 seconds! in support Arthritis Research (back row: middle/8th from left).



R-L: Noreen Harrington; Dr Clare Matthews (Ulster Hospital) and Dr Adrian Pendleton (Musgrave Park Hospital – Belfast)



Dr Donncha O'Gradaigh: Chair – introducing speaker Dr David Hevey (Psychology – TCD)



Dr David Hevey (TCD) – speaker



Dr Connail McCrory (SJH – Pain Clinic) – speaker



Dr Siobhan MacHale (Beaumont – Psychiatrist) - speaker



R-L front row: Phil Gallagher (SVUH); Eileen O'Flynn (SVUH) Grainne O'Leary (Arthritis Ireland); 2nd row R-L: Miriam Molloy (SVUH); Eileen Shinnars (OLH); Rhona Galway (Ulster Hospital); third row R-L: Dr Shama Khan (CUH); Dr Fahd Adeeb (Limerick); Dr Ismail Abdelbagi (Craigavon); 4th row R-L: Dr Patricia Minnock (OLH); Louise Moore (OLH); back row L-R: DR Jon Wood and Dr Julian Maitland



ISR Audience – front centre Dr Donncha O'Gradaigh part of Academic Team from University Hospital Waterford (3rd speaker)



Audience – ISR Biologics Register discussion with ISR members – foreground front row: L-R Dr Frances Stafford (Blackrock Clinic); Prof Geraldine McCarthy (Mater) and Prof Gaye Cunnane (SJH)
2nd row: L-R Prof Douglas Veale (SVUH) and Dr John-Paul Doran (Newcastle) third row: Dr Sinéad Harney (CUH); Dr Paul O'Connell (Beaumont) and Prof John Carey (Galway)



Prof David Kane (ISR President), facilitating discussion further to the presentation by Prof Gerry Wilson (Chair of Rheumatology: UCD), Dr Bryan Whelan (Manorhamilton/Sligo) and Dr Michele Doran (SJH) about the initiation & establishment of a Biologics Register by the ISR



Presentation to the 2014: Young Investigator Award winners Dr Lorna Gallagher (TCD & AMNCH) and Dr Ronan Mullan (AMNCH) by the ISR President - Prof David Kane (left)



Transforming lives¹

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More than 350 trials¹⁸

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15 years



ABBREVIATED PRESCRIBING INFORMATION

Enbrel[®] etanercept
Before prescribing Enbrel[®] please refer to full Summary of Product Characteristics (SmPC). Presentation: Enbrel Pre-filled Syringe: Enbrel 25 mg and 50 mg solution for injection in pre-filled syringe. Each pre-filled syringe contains either 25 mg or 50 mg etanercept. Enbrel Pre-filled Pen (MYCLIC[®]): Enbrel 50 mg solution for injection in pre-filled pen. Each pre-filled pen contains 50 mg etanercept. Enbrel Powder: Enbrel 25 mg powder and solvent for solution for injection. Each vial contains 25 mg etanercept and each pre-filled syringe contains 1 ml water for injections. Enbrel Paediatric: Enbrel 10 mg powder and solvent for solution for injection for paediatric use. Each vial contains 10 mg etanercept and each pre-filled syringe contains 1 ml water for injections.
Uses: Adults: Moderate to severe active rheumatoid arthritis (RA), in combination with methotrexate, when response to disease-modifying anti-rheumatic drugs (DMARDs), including methotrexate (unless contraindicated), has been inadequate. Enbrel can be given as monotherapy in the case of intolerance to methotrexate or when continued treatment with methotrexate is inappropriate. Severe, active and progressive RA without prior methotrexate treatment. Enbrel alone or with methotrexate has been shown to reduce the rate of progression of joint damage measured by X-ray and to improve physical function. Patients with moderate to severe plaque psoriasis (PP) who failed to respond to, or who have a contraindication to, or are intolerant to other systemic therapy including ciclosporin, methotrexate or PUVA. Active and progressive psoriatic arthritis (PsA) when response to DMARDs has been inadequate. Enbrel has been shown to improve physical function in PsA patients, and to reduce the progression rate of peripheral joint damage as measured by X-ray in patients with polyarticular symmetrical subtypes of PsA. Severe active ankylosing spondylitis (AS) when response to conventional therapy has been inadequate. Non-radiographic axial spondyloarthritis (nr-axSpA). Treatment of adults with severe non-radiographic axial spondyloarthritis with objective signs of inflammation as indicated by elevated C-reactive protein (CRP) and/or magnetic resonance imaging (MRI) evidence, who have had an inadequate response to nonsteroidal anti-inflammatory drugs (NSAIDs). Children aged 2-17 years: Juvenile idiopathic arthritis (JIA). Polyarthritis (rheumatoid factor positive or negative) and extended oligoarthritis from the age of 2 years when inadequate response to, or intolerant of methotrexate. Psoriatic arthritis from the age of 12 years when inadequate response to, or intolerant of methotrexate. Enthesitis-related arthritis from the age of 12 years when inadequate response to, or intolerant of conventional therapy. Children aged 6-17 years: Chronic severe psoriasis when inadequately controlled by, or intolerant to, other systemic therapies or phototherapies.
Dosage: By subcutaneous injection. Adults: RA - 25 mg twice weekly or 50 mg once weekly PP - 25 mg twice weekly or 50 mg once weekly for up to 24 weeks, or 50 mg twice weekly for up to 12 weeks followed by 25 mg twice weekly or 50 mg once weekly for a further 12 weeks if needed. Continuous therapy may be appropriate for some adult patients. Discontinue if no response after 12 weeks. For re-treatment: 25 mg twice weekly or 50 mg once weekly for up to 24 weeks. AS, nr-axSpA and PsA - 25 mg twice weekly or 50 mg once weekly. Children aged 2-17 years: JIA - 0.4 mg/kg (maximum per dose 25 mg) twice weekly with an interval of 3-4 days or 0.8 mg/kg (maximum per dose 50 mg) once weekly. Discontinuation of treatment should be considered in patients who show no response after 4 months. Children aged 6-17 years: Plaque psoriasis in children aged 6-17 years - 0.8 mg/kg (maximum per dose 50 mg) once weekly for up to 24 weeks. Discontinue if no response after 12 weeks. For re-treatment: 0.8 mg/kg (maximum per dose 50 mg) once weekly for up to 24 weeks.
Contra-indications: Hypersensitivity to any of the ingredients, sepsis or risk of sepsis, active infections.
Warnings and Precautions: Enbrel should be initiated and supervised by specialist physicians experienced in the diagnosis and treatment of RA, JIA, PsA, AS, PP or Paediatric PP. Patients treated with Enbrel should be given the Patient Alert Card. Use carefully in patients predisposed to, or with history of, infection due to underlying diseases other than RA (e.g. advanced or poorly controlled diabetes) or with history of blood dyscrasias, pre-existing or predisposition to demyelinating disease or congestive heart failure. Cases of active tuberculosis have been reported, therefore all patients should be evaluated for both active and inactive TB prior to being treated with Enbrel. If active TB is diagnosed, Enbrel should not be initiated. Caution should be used when administering Enbrel to patients previously infected with hepatitis B and there have been reports of worsening hepatitis C in patients receiving Enbrel. Use with caution in patients with a history of hepatitis C. Whether treatment with Enbrel might influence the development and course of active and/or chronic infections is unknown. Concurrent administration of Enbrel and anakinra has been associated with increased risk of serious infections and neutropenia, and is therefore not recommended. In clinical studies, concurrent administration of abatacept and Enbrel resulted in increased incidences of serious adverse events, and is therefore not recommended. Use caution when considering combination therapy with DMARDs other than methotrexate. Reports of various malignancies have been received in the post-marketing period, therefore with current knowledge, a possible risk for the development of lymphomas, leukaemia or other haematopoietic or solid malignancies in patients treated with a TNF-antagonist cannot be excluded. Malignancies, some fatal, have been reported among children, adolescents and young adults (up to 22 years of age) treated with TNF-antagonists (initiation of therapy ≤ 18 years of age) in the post marketing setting. Melanoma and non-melanoma skin cancer (NMSC) have been reported in patients treated with TNF-antagonists, including Enbrel. Post-marketing cases of Merkel cell carcinoma have been reported very infrequently in patients treated with Enbrel. Periodic skin examination is recommended for all patients, particularly those with risk factors for skin cancer. Enbrel has not been studied in combination with other systemic

therapies or phototherapy for the treatment of psoriasis. Monitor closely if patient develops new infection during treatment. Discontinue treatment if serious infection or allergic reaction develops or if blood dyscrasias are confirmed. Caution should be used in patients who have moderate to severe alcoholic hepatitis and Enbrel should not be used in patients for the treatment of alcoholic hepatitis. Discontinue temporarily if significantly exposed to varicella virus. Live vaccines should not be given concurrently with Enbrel. Paediatric patients should have received all vaccines recommended in current immunization guidelines prior to starting Enbrel. Treatment with Enbrel may result in the formation of autoantibodies. Enbrel is not recommended for use in patients with Wegener's granulomatosis. There have been reports of hypoglycaemia in Enbrel patients receiving medication for diabetes, necessitating a reduction in anti-diabetic medication in some of these patients. There have been reports of Inflammatory Bowel Disease (IBD) and uveitis in JIA patients being treated with Enbrel. Caution should be exercised when treating the elderly and with particular attention to occurrence of infections.
Pregnancy & Lactation: Enbrel is not recommended in pregnant or breast-feeding women.
Undesirable Effects: Adults: The most commonly reported adverse reactions are injection site reactions, infections, allergic reactions, development of autoantibodies, itching and fever. See SmPC for less commonly reported side effects. TNF-antagonists, such as Enbrel, affect the immune system and their use may affect the body's defences against infection and cancer. Serious infections affect fewer than 1 in 100 patients treated with Enbrel. Reports have included fatal and life-threatening infections and sepsis. Various malignancies have also been reported with use of Enbrel, including cancers of the breast, lung, skin and lymphatic system (lymphoma). Serious infections and other adverse events such as uncommon reports of: thrombocytopenia, systemic vasculitis, uveitis and scleritis, interstitial lung disease, rare reports of tuberculosis, opportunistic infections, anaemia, leucopenia, neutropenia, pancytopenia, seizures, worsening of heart failure, autoimmune hepatitis, Steven Johnson's syndrome and very rare reports of: anaphylaxis, toxic epidermal necrolysis and aplastic anaemia have been reported. Reactivation of hepatitis B (a liver infection) and worsening of symptoms of dermatomyositis have also been reported. Central and peripheral demyelinating events have been seen rarely and very rarely, respectively, with Enbrel use. There have been rare reports of lupus, lupus-related conditions, and vasculitis. Rate of new malignancies was similar to that expected for the population studied. Fatalities associated with serious infections, pancytopenia, aplastic anaemia and interstitial lung disease have also been reported.
Paediatrics: Generally as for adults, except the following were more common: headaches, nausea, vomiting and abdominal pain. In addition the following were reported as severe events: varicella, appendicitis, gastroenteritis, depression/personality disorder, cutaneous ulcer, oesophagitis/gastritis, group A streptococcal septic shock, type 1 diabetes mellitus and soft tissue and post operative wound infection. There have been post-marketing reports of IBD and uveitis in JIA patients, including cases indicating a positive re-challenge. See section 4.8 of the SmPC for how to report adverse reactions.
Package Quantities: Enbrel Pre-filled Syringe: Each carton contains 4 pre-filled syringes containing either 25 mg or 50 mg of Enbrel and 4 alcohol swabs. Enbrel Pre-filled Pen (MYCLIC): Each carton contains 4 pre-filled pens containing 50 mg of Enbrel and 4 alcohol swabs. Enbrel Powder: Each carton contains 4 vials of Enbrel 25 mg powder, 4 pre-filled syringes of water for injections, 4 needles, 4 vial adaptors and 8 alcohol swabs. Enbrel Paediatric (10 mg): Each carton contains 4 vials of Enbrel 10 mg powder, 4 pre-filled syringes of water for injections, 4 needles, 4 vial adaptors and 8 alcohol swabs.
European Marketing Authorisation Numbers: Enbrel Pre-filled Syringe 25 mg: EU/1/99/126/013 Enbrel Pre-filled Syringe 50 mg: EU/1/99/126/017 Enbrel Pre-filled Pen (MYCLIC) 50 mg: EU/1/99/126/020 Enbrel Powder 25 mg: EU/1/99/126/003 Enbrel Paediatric 10 mg: EU/1/99/126/022.
Legal Category: S1A. European Marketing Authorisation Holder: Pfizer Limited, Ramsgate Road, Sandwich, Kent, CT13 9NJ, UK. For full prescribing information see the Summary of Product Characteristics. For further information on this medicine please contact: Pfizer Medical Information on 1800 633 363 or at EU.MEDINFO@pfizer.com. For queries regarding product availability please contact: Pfizer Healthcare Ireland, Pfizer Building 9, Riverwalk, National Digital Park, Citywest Business Campus, Dublin 24 + 353 1 4676500.
API Reference Number: EN 8_0_Pfizer number: 2013-0003980. Date of Prescribing Information: July 2014.

[†] Across all indications.

References: 1. Scott LJ. Drugs. 2014;74:1379-1410. 2. Enbrel Summary of Product Characteristics. September 2014. 3. Humira Summary of Product Characteristics. November 2014. 4. Remicade Summary of Product Characteristics. July 2014. 5. Cimzia Summary of Product Characteristics. December 2014. 6. Simponi Summary of Product Characteristics. January 2015. 7. Remicade EMA report 8. http://clinicaltrials.gov. Accessed 12 Nov 2014. 9. www.pubmed.org. Accessed 12 Nov 2014. 10. Data on File. January 2015. 11. Data on File. March 2014.



IN DMARD-IR AND
TNF-IR RA PATIENTS,
WHEN COMBINATION
WITH MTX IS NOT
AN OPTION...

THINK
ROACTEMRA¹

Now Available in
Subcutaneous (SC)

RoACTEMRA[®]
tocilizumab

ABRIDGED PRESCRIBING INFORMATION

(For full prescribing information, refer to the Summary of Product Characteristics [SmPC])

RoActemra[®] (tocilizumab) 20mg/ml Concentrate for Solution for Infusion (RoActemra IV) and RoActemra[®] 162mg solution for injection in pre-filled syringe (RoActemra SC)
Indications: ABRIDGED PRESCRIBING INFORMATION (For full prescribing information, refer to the Summary of Product Characteristics [SmPC])

RoActemra[®] (tocilizumab) 20mg/ml Concentrate for Solution for Infusion (RoActemra IV) and RoActemra[®] 162mg solution for injection in pre-filled syringe (RoActemra SC)

Indications: RoActemra SC: In combination with methotrexate (MTX), for the treatment of adult patients with moderate to severe active rheumatoid arthritis (RA) who have had an inadequate response or intolerance to one or more disease-modifying anti-rheumatic drugs (DMARDs) or tumour necrosis factor (TNF) antagonists. **RoActemra IV:** In combination with MTX for the treatment of (i) severe, active and progressive RA in adults not previously treated with MTX, (ii) adult patients with moderate to severe active RA who have had an inadequate response or intolerance to one or more DMARDs or TNF antagonists, (iii) active systemic juvenile idiopathic arthritis (sJIA) in patients ≥ 2 years of age, who responded inadequately to previous therapy with NSAIDs and systemic corticosteroids, (iv) juvenile idiopathic polyarthritis (pJIA) (rheumatoid factor positive or negative and extended oligoarthritis) in patients ≥ 2 years of age, who responded inadequately to previous therapy with MTX. RoActemra IV/SC can be given as monotherapy in case of intolerance to MTX or where continued treatment with MTX is inappropriate for all indications. RoActemra IV/SC has been shown to reduce the rate of progression of joint damage as measured by X-ray and to improve physical function when given in combination with MTX for the treatment of adult RA patients. **Dosage & Administration:** Treatment should be initiated by HCPs experienced in the diagnosis and treatment of RA, sJIA or pJIA and all patients should be given the Patient Alert Card. **RA:** RoActemra IV: 8mg/kg diluted to a final volume of 100ml, given once every 4 weeks by IV infusion over 1 hour. For patients >100kg, doses >800mg per infusion are not recommended. No data on doses above 1.2g. **RoActemra SC:** 162mg once every week, irrespective of weight. Patients may self-inject after training. Rotate injection site frequently. **sJIA (RoActemra IV only):** Patients <2 years of age – no data. Patients >2 years, 8mg/kg diluted to final volume of 100ml for patients > 30kg or 12mg/kg diluted to final volume of 50ml for patients < 30kg once every 2 weeks by IV infusion over 1 hour. Clinical improvement generally seen within 12 weeks of starting RoActemra; reconsider continued therapy if no improvement. For pJIA/sJIA: check patient's weight at each visit. Dose adjustments: For raised liver enzymes, modify concomitant DMARDs if appropriate, reduce or interrupt dose of RoActemra; for low absolute neutrophil count (ANC) or low platelet count reduce or interrupt RoActemra. In some instances discontinue RoActemra (see SmPC). **Special Populations:** No data available for RoActemra SC in patients <18 years of age. Closely monitor renal function in patients with moderate to severe renal impairment. No data in patients with hepatic impairment. No dose adjustments in patients >65 years. **Contraindications:** Hypersensitivity to any component of the product; active, severe infections. **Warnings & Precautions:** Cases of serious infections (sometimes fatal) have been reported; interrupt therapy until controlled. Caution in patients with recurring/chronic infections, or other underlying conditions (e.g. diverticulitis, diabetes and interstitial lung disease) which predisposes to infection. Patients and parents/guardians of sJIA and pJIA patients should contact their HCP when symptoms suggestive of infection appear. Screen for latent TB and treat if required prior to starting therapy. Patients to seek medical attention if sign/symptoms suggestive of TB occur during or after treatment. Viral reactivation (e.g. hepatitis B) reported with biologic therapies. Caution in patients with a history of intestinal ulceration or diverticulitis. Serious hypersensitivity reactions, including anaphylaxis, reported and may be more severe and potentially fatal in patients who have experienced hypersensitivity reactions during previous treatment even if they have received premedication with steroids and anti-histamines. If an anaphylactic reaction or other serious hypersensitivity/serious infusion related reaction occurs, permanently discontinue RoActemra. Use with caution in patients with active hepatic disease/impairment. Not recommended in patients with baseline ALT or AST > 5 x ULN; caution in patients with ALT or AST > 1.5 x ULN (see SmPC). Risk of neutropenia may increase in patients previously treated with TNF antagonist. Continued therapy not recommended in patients with ANC < 0.5 x 10⁹/l or platelet count < 50 x 10³/µl. Do not initiate RoActemra treatment where ANC is below 2 x 10⁹/l. Caution in patients with low platelet count; monitor neutrophils and platelets in RA, sJIA and pJIA patients according to SmPC. Elevations in lipid parameters seen; if elevated, follow local guidelines. Be vigilant for symptoms of new-onset central demyelinating disorders. Immunomodulatory medicines may increase malignancy risk in RA patients. Live and live attenuated vaccines should not be given concurrently (see SmPC). Not recommended for use with other biological agents. Macrophage activation syndrome (MAS), a serious life-threatening disorder, may develop in sJIA patients – RoActemra not studied in patients during an active MAS episode. Trade name should be clearly recorded in patient file to improve traceability of biological medicines. **Drug Interactions:** Studies only performed in adults. Monitor patients taking medicines individually adjusted and metabolised via CYP450 3A4, 1A2 or 2C9 when starting/stopping RoActemra, as doses may need to be increased to maintain therapeutic effect. Effects of tocilizumab on CYP450 enzyme activity may persist for several weeks after stopping therapy (refer to SmPC for further details on cytochrome CYP450 and other drug interactions). **Fertility, Pregnancy & Lactation:** Women should use contraception during and up to 3 months after treatment. No adequate data from use in pregnant women. Animal study showed increased risk of spontaneous abortion/embryo-fetal death at high dose. RoActemra should not be used during pregnancy unless clearly necessary. No lactation data in humans. A decision on whether to continue/discontinue breastfeeding or RoActemra therapy should be made taking into account the relative benefits to the child and mother. Refer to SmPC. **Effects on ability to drive and use machines:** RoActemra has minor influence on the ability to drive and use machines (dizziness). **Undesirable Effects:** Prescribers should consult SmPC for full details of ADRs. **RoActemra IV:** RA: ADRs occurring in RoActemra trials: Very Common (> 1/10): upper respiratory tract infections, hypercholesterolaemia. Common (> 1/100 - < 1/10): cellulitis, pneumonia, oral herpes simplex, herpes zoster, abdominal pain, mouth ulceration, gastritis, rash, pruritus, urticaria, headache, dizziness, hepatic transaminases increased, weight increased, total bilirubin increased, hypertension, leucopenia, neutropenia, peripheral oedema, hypersensitivity reactions, conjunctivitis, cough and dyspnoea. sJIA: ADRs were similar to those seen in RA patients. Serious infections of varicella and otitis media reported (in addition to infections for RA). Hypersensitivity reactions requiring treatment/discontinuation occurred in <1% of patients. Other events occurring within 24 hours of infusion (16% of patients) included rash, urticaria (considered serious), diarrhoea, epigastric discomfort, arthralgia and headache. Decreased IgG levels during therapy. pJIA: ADRs were similar to those seen in RA and sJIA patients. Nasopharyngitis, headache, nausea, and decreased neutrophil count more frequently reported in the pJIA population. The incidence of infections leading to dose interruptions was numerically higher in patients weighing <30 kg, the rate of serious infections was also higher in these patients. 20.2% experienced an infusion reaction within 24 hours of infusion. **RoActemra SC:** The safety and immunogenicity was consistent with the known safety profile of IV. Injection site reactions (including erythema, pruritus, pain and haematoma) were mild to moderate in severity. **Serious or Potentially Serious:** serious infections, active tuberculosis, invasive pulmonary infections, interstitial lung disease (including pneumonitis and pulmonary fibrosis), GI perforations (as complications of diverticulitis), serious hypersensitivity reactions, Stevens-Johnson syndrome. See SmPC section 4.8 for instructions on the reporting of Suspected Adverse Reactions. **Legal Category:** Subject to medical prescription which may not be renewed (A). **Presentations & Marketing Authorisation Numbers:** 80mg of tocilizumab in 4ml (20mg/ml) pack of 1 (EU/1/08/492/001); 200mg of tocilizumab in 10ml (20mg/ml) pack of 1 (EU/1/08/492/003); 400mg of tocilizumab in 20ml (20mg/ml) pack of 1 (EU/1/08/492/005); 162mg tocilizumab solution for injection (in 0.9ml) in pre-filled syringe (EU/1/08/492/007). **Marketing Authorisation Holder:** Roche Registration Limited, 6 Falcon Way, Shire Park, Welwyn Garden City, AL7 1TW, United Kingdom. RoActemra is a registered trade mark. Further information is available from Roche Products (Ireland) Limited, 3004 Lake Drive, Citywest, Nass Road, Dublin 24. Telephone: (01) 4690700. Fax: (01) 4690791. **Date of Preparation:** March 2015.

Date of issue: June 2015. I/E/RACTE/0615/011

Reference: 1. Nisar MK et al. The role of tocilizumab monotherapy in the management of rheumatoid arthritis: a review. Int. J. Clin. Rheumatol. (2012) 7(1): 9-19.

