

In my presentation I will showcase the State of the Art technologies of biomarker research and how the information that comes from this can be implemented for improving clinical care. I will discuss the revolution of molecular profiling and how the large amount of data coming from these approaches is used to molecularly classify patients into molecular fingerprints. How this technology leads to a disruptive change in medicine for the coming 5-10 years. I will close off with the role of biomarkers in the treatment of diseases, trial design and drug development for the coming 5 years.

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**SP0160 DISEASE REMISSION: DO WE AIM FOR THE SAME THING?**

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It is consensually accepted that the most important therapeutic goals for treating rheumatoid arthritis (as well as other inflammatory arthritis) are eliminating signs and symptoms (such as joint pain, swelling, and stiffness); preventing joint damage or its progression; and maximizing physical function and quality of life (Aletaha & Smolen, 2019). According to current medical knowledge, these aims are believed to be best accomplished by achieving disease remission, a state in which no or only minimal residual inflammation is discernible (Aletaha & Smolen, 2019). However, different studies have been providing evidence that achieving inflammatory remission is not enough as a considerable proportion of patients with no or minimal inflammation remain with high levels of pain, fatigue, functional impairment, mental health problems, among other symptoms (Boone et al., 2019; Ferreira et al., 2019; Ferreira et al., 2017). The perfect path to achieve good results is still to be defined, namely, regarding the T2T strategy (van Vollenhoven, 2019). Recent studies still show that despite a high level of patient agreement with RA T2T, patient engagement in this process needs to be improved in order to individualize therapy adjustments, make shared decisions and decide on targets that accurately reflect disease control according to patients (Benham et al., 2019). In this session I would address the following questions:

- Is aiming for one target enough nowadays?
- Do health professionals and patients aim for the same thing when defining treatment strategies?
- Do the current treatment targets pose a risk of overtreatment with immunosuppressive therapy?

This presentation is informed by current research in this area including research from our own group (Ferreira et al., 2018; Santos et al., 2018).

**REFERENCES:**

- [1] Aletaha, D., & Smolen, J. S. (2019). Achieving Clinical Remission for Patients With Rheumatoid Arthritis. *JAMA*, 321(5), 457-458. doi:10.1001/jama.2018.21249
- [2] Benham, H., Rutherford, M., Kirby, S., Stebbings, S., White, D., Sim, D., & Harrison, A. (2019). Treat-to-target in rheumatoid arthritis: Evaluating the patient perspective using the Patient Opinion Real-Time Anonymous Liaison system: The RA T2T PORTAL study. *International Journal of Rheumatic Diseases*. doi:10.1111/1756-185x.13514
- [3] Boone, N. W., Sepriano, A., van der Kuy, P. H., Janknegt, R., Peeters, R., & Landewe, R. B. M. (2019). Cotreatment with methotrexate in routine care patients with rheumatoid arthritis receiving biological treatment yields better outcomes over time. *RMD Open*, 5(1), e000836. doi:10.1136/rmdopen-2018-000836
- [4] Ferreira, R. J. O., Carvalho, P. D., Ndosi, M., Duarte, C., Chopra, A., Murphy, E., . . . da Silva, J. A. P. (2019). Impact of patient global assessment on achieving remission in patients with rheumatoid arthritis: a multinational study using the METEOR database. *Arthritis Care Res (Hoboken)*. doi:10.1002/acr.23866
- [5] Ferreira, R. J. O., Dougados, M., Kirwan, J., Duarte, C., de Wit, M., Soubrier, M., . . . Gossec, L. (2017). Drivers of patient global assessment in patients with rheumatoid arthritis who are close to remission: an analysis of 1588 patients. *Rheumatology*. doi:10.1093/rheumatology/kex211
- [6] Ferreira, R. J. O., Ndosi, M., de Wit, M., Santos, E. J. F., Duarte, C., Jacobs, J. W. G., . . . da Silva, J. A. P. (2018). Dual target strategy: a proposal to mitigate the risk of overtreatment and enhance patient satisfaction in rheumatoid arthritis. *Annals of the Rheumatic Diseases*. doi:10.1136/annrheumdis-2018-214199
- [7] Santos, E. J. F., Duarte, C., Ferreira, R. J. O., Pinto, A. M., Geenen, R., & da Silva, J. A. P. (2018). Determinants of happiness and quality of life in

patients with rheumatoid arthritis: a structural equation modelling approach. *Annals of the Rheumatic Diseases*, 77(8), 1118-1124. doi:10.1136/annrheumdis-2017-212934

- [8] van Vollenhoven, R. (2019). Treat-to-target in rheumatoid arthritis - are we there yet? *Nature Reviews. Rheumatology*, 15(3), 180-186. doi:10.1038/s41584-019-0170-5

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**SP0161 LOOKING FOR A NEEDLE IN A HAYSTACK: HELPING YOUNG PEOPLE TO MAKE SENSE OF EVIDENCE BASED HEALTH CARE**

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While it has been suggested that there are no differences in the occurrence of risk-taking behaviours in young people with chronic conditions compared with healthy peers, young people with chronic conditions often face the dilemma of balancing twice the amount of risk to that of other young people, owing to their condition and treatment. For example, young people with juvenile idiopathic arthritis taking methotrexate face the risks of alcohol consumption plus the increased risk of toxicity from consuming alcohol while taking methotrexate. However, such issues are often ignored or overlooked (1). Research has suggested that a lack of experience with, and not worrying about serious health consequences may desensitise young people with chronic conditions to potential health risks (2). It is also recognised that young people's perceived focus of health and wellbeing can often be on short-term goals; which is often paradoxical to the focus of families and healthcare professionals thinking about longer-term outcomes and prognosis.

It has been demonstrated that young people with chronic conditions value interventions that enable them to live a "normal" life – extending beyond the clinical management of their condition (3). The emotional, social, and vocational consequences of condition management can be profound (4). When this is coupled with the challenges of accessing accurate, trusted and individualised information and support, it can often leave young people and their families feeling as though they are looking for a 'needle in a haystack'. Finding the best evidence requires knowledge of the best quality and most appropriate sources, as well as the ability to use and navigate such resources appropriately (5). In an era where health information is easier and faster to find than ever before, it is often a challenge for young people to be able to filter the 'good' from the 'not so good'. There are significant amounts of unreliable and irrelevant content on the internet, which ultimately places the responsibility for interpretation of information and advice onto young people and their families.

Therefore, age- and developmentally- appropriate opportunities to discuss health, wellbeing and the effects of treatment need to be provided early and regularly, across the lifecourse, in multiple formats to suit individual needs and circumstances. Attempts have already been made to make health information more accessible, for example, with the introduction of the Accessible Information Standard within the National Health Service (6). However, this is not necessarily enough to engage and support young people with chronic conditions in making sense of evidence-based healthcare. Information needs to be taken, in the right formats, to where young people are interacting, such as on certain social media platforms. This needs to be multifaceted, using peer- and community-driven approaches to enhance engagement. Furthermore, periodic consideration of the long-term risks and benefits of health and wellbeing interventions needs to happen across the lifecourse, both as a prompt for young people to air their concerns, but to also check their understanding. Only through understanding young people's values, preferences, and concerns can a sustainable balance between condition control, treatment burden and quality of life be achieved.

**REFERENCES:**

- [1] McDonagh JE. Getting It Right For Young People: Developing Adolescent Rheumatology Services. *Future Rheumatol* 2008; 3(2):133-41.
- [2] Greening L, et al. Predictors of children's and adolescents' risk perception. *J Ped Psych* 2005; 30(5):425-35.
- [3] van Houtum L, et al. Do everyday problems of people with chronic illness interfere with their disease management? *BMC Public Health* 2015;15:1000.
- [4] Hart RI, et al. Being as normal as possible: how young people ages 16–25 years evaluate the risks and benefits of treatment for inflammatory arthritis. *Arthritis Care Res* 2016; 68(9):1288-94.
- [5] NHS England. Accessible information: Specification v1.1. 2017.

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**FRIDAY, 14 JUNE 2019**

**15:30:00 – 17:00:00**

## Remission – the holy grail? Looking across diseases

### SP0162 REMISSION IN RA: DOES THE DEFINITION MATTER?

Daniel Aletaha. *Medical University of Vienna, Department of Medicine III, Division of Rheumatology, Austria*

Remission is the ultimate target for chronic inflammatory rheumatic disease, and so also for rheumatoid arthritis (RA). In this presentation, we will review the challenges in defining and assessing remission. Further, we will discuss if remission should be a clinical target, or whether imaging results, e.g. from ultrasound or MRI examinations, should be included in the concept of remission. Many symptoms in patients with RA may mimic RA disease activity, while they are not directly a consequence of the disease process, with secondary pain syndromes being a typical example. Finally, patients are the most important stakeholders on the question of whether or not a musculoskeletal disease is in remission. Patient reported outcomes have been criticised for their subjectivity and their role in remission indices has been questioned. We will also explore the influence and Pro's and Con's of these measures on remission assessment.

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### SP0163 REMISSION IN SLE: WHAT TO AIM FOR?

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It is generally acknowledged that, in SLE, disease activity is associated with poor prognosis, high glucocorticoid use, damage development and increased mortality; therefore reaching low level of disease activity or remission are main treatment targets for SLE.

Definitions for disease remission and low disease activity are being proposed and validated as meaningful targets to be pursued in SLE management.

In detail an international task force has recently developed a definition of remission in SLE (DORIS) taking in consideration four different domains: clinical activity, serological activity, treatment and duration. This approach led to the development of different levels of remission i.e. clinical remission on/off treatment and complete remission on/off treatment.

Recently data from different cohorts have been published, showing that remission is an achievable target in SLE. Achieving remission appears associated with reduced damage accrual, however persistence in remission is rare being maintained in an average of 7% of patients over 5 years. In addition, the more stringent is the definition, the more difficult is to achieve remission and a longer time to remission is observed in patients with high activity, high therapy, hematological activity, African-American ethnicity.

Low disease activity may represent another target in SLE treatment and a definition of (lupus low disease activity state (LLDAS) has been developed by Franklyn et al. LLDAS is defined based on three domains which are SLEDAI-2k 4, physician global assessment (PGA) 1, absence of new manifestations and stable and well tolerated treatment with a prednisolone (or equivalent) dose of 7.5 mg/day. Interestingly, LLDAS is achieved by a high percentage of patients over follow up, ranging between 33 and 88% in different cohorts and it is maintained over follow up in up to 50% of patients for 50% of follow up time. Predictive factors for LLDAS attainment are shorter disease duration, lower disease activity score, lower mean PGA, lower mean SLEDAI, older age; while persistent LLDAS is less frequent in

patients with vasculitis, neurological, renal, cardiopulmonary and mucocutaneous manifestations.

Achievement and persistence of LLDAS are associated with lower prednisone dose during follow up, reduction of disease flares, lower damage accrual, better quality of life.

In conclusion, definitions of remission and low disease activity in SLE have been proposed and validated against outcomes such as glucocorticoids usage, damage accrual, quality of life.

Both targets are associated with improved outcomes, however at present persistence in remission is not common. The achievement of LLDAS is not rare, persistence in LLDAS is achievable.

### REFERENCES:

- [1] van Vollenhoven RF, Mosca M, Bertsias G, et al. Treat-to-target in systemic lupus erythematosus: recommendations from an international task force. *Ann Rheum Dis* 2014;73:958-67.
- [2] van Vollenhoven R, Voskuyl A, Bertsias G, et al. A framework for remission in SLE: consensus findings from a large international task force on definitions of remission in SLE (DORIS). *Ann Rheum Dis* 2017;76:554-561.
- [3] Franklyn K, Lau CS, Navarra SV, et al. Asia-Pacific Lupus Collaboration. Definition and initial validation of a Lupus Low Disease Activity State (LLDAS). *Ann Rheum Dis* 2016;75:1615-21.
- [4] Petri M, Magder LS. Comparison of Remission and Lupus Low Disease Activity State in Damage Prevention in a United States Systemic Lupus Erythematosus Cohort. *Arthritis Rheumatol* 2018.
- [5] Tsang-A-Sjoe MW, Bultink IE, Heslinga M, et al. Both prolonged remission and Lupus Low Disease Activity State are associated with reduced damage accrual in systemic lupus erythematosus. *Rheumatology* 2017;56:121-28.
- [6] Zen M, Iaccarino L, Gatto M, et al. Lupus low disease activity state is associated with a decrease in damage progression in Caucasian patients with SLE, but overlaps with remission. *Ann Rheum Dis* 2018;77:104-10.
- [7] Zen M, Iaccarino L, Gatto M, et al. The effect of different durations of remission on damage accrual: results from a prospective monocentric cohort of Caucasian patients. *Ann Rheum Dis* 2017;76:562-65.
- [8] Tselios K, Gladman DD, Touma Z, et al. Clinical remission and low disease activity have comparable outcomes over 10 years in systemic lupus erythematosus. *Arthritis Care Res* 2018.

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**FRIDAY, 14 JUNE 2019**

**15:30:00 – 17:00:00**

## Laboratory course – from the clinic to the lab and back (from translation to prescription)

### SP0164 ANA DIAGNOSTIC AND ANTIPHOSPHOLIPID SYNDROME (APS) AS INHERITED COAGULATION DISORDER

Thomas Dörner. *Charite Berlin, Berlin, Germany*

Use of ANA diagnostic is key for systemic autoimmune diseases. ANA is an overarching term and the underlying specificities are important for defined diagnosis of SLE, Sjögren's, systemic sclerosis etc. Diagnostic algorithms of ANA and new semi-automated procedures are discussed in the context of case discussions. Subsequently, the value and limitations of the diagnostics of lupus anticoagulant and antiphospholipid antibodies as key serologic findings in antiphospholipid syndrome are discussed in the context of instructive cases.

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