## Dear all,

We would like to invite you to the next NVF webinar organized by the Dutch Pharmacological Society and listen to the talks of Dr. Ard Teisman and PhD candidate Annika Jüttner.

## When? 22<sup>nd</sup> of November at 16:00-17:00 CET

**Where**? <u>https://teams.microsoft.com/l/meetup-</u> join/19%3ameeting\_MjFlOTU2ODgtZTZiZi00MjUxLTkwYmUtNjBkYTA1ZWE2N2Y1%40thread.v2/0?conte xt=%7b%22Tid%22%3a%22526638ba-6af3-4b0f-a532-a1a511f4ac80%22%2c%22Oid%22%3a%222de05d07-67d9-469b-b13a-c9fa88ac22cd%22%7d

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<u>Speaker 1:</u> Dr. Ard Teisman Dept. Global Safety Pharmacology - Jansen Pharmaceutica / Johnson & Johnson Innovative Medicines, Beerse, Belgium

Title of the talk: The Use of Stem Cell Models in a Drug Selection De-Risking Cascade

About Speaker: since I joined Janssen Pharmaceutica back in 2001, I've been involved in Safety Pharmacology and helped drug discovery-projects in their search of finding the

best and safest drug-candidates to move this forward along the pipeline. The field of Safety Pharmacology differentiates on one end from Pharmacology in that it assesses unfavorable side effects of drug candidates and on the other end from Toxicology in that it looks for unfavorable physiological changes and not for direct structural tissue damage. This objective has an impact for the models, methods and strategy used. Within our team we apply in silico, in vitro and in vivo models in an integrated cascading fashion and look for complementary end-points across the models. Along my career the use of stem-cells models in de-risking strategies gained importance and at a certain point in time replaced a traditional animal-based pharmacology model. The learning curve, stepped approach, characterization (understanding opportunities and limitations) and decisions leading to this transition will be illustrated in this webinar.



<u>Speaker 2:</u> Annika Jüttner, PhD candidate, Pharmacology and Vascular Medicine, Erasmus Medical Centre, Rotterdam

<u>**Title of the talk:**</u> Effects of hibernation inspired modified 6-chromanol SUL-238 on vascular aging

<u>Abstract:</u> Vascular aging is marked by decreased vasodilation including lower nitric oxide (NO)– cyclic guanosine monophosphate (cGMP) –signaling. This can be partially and transiently compensated by endothelium-derived hyperpolarization (EDH) to avoid total loss of vascular function. Increased levels of reactive oxygen species (ROS) in the vasculature, believed to be produced by mitochondria, lead to loss of NO during aging. Both vasodilator pathways, NO-cGMP- and EDH-signaling, are potential drug targets to alleviate aging-related dysfunctions and targeting both would be an ideal mechanism for a new drug. The recently developed drug class of SUL-compounds, modified 6-chromanols, was shown to decrease ROS-production by inhibiting reverse mitochondrial electron transfer. In this talk, the effect of chronic treatment with the compound SUL-238 on vascular aging in mouse models will be discussed, highlighting NO-cGMP signaling, EDH signaling, and other aspects of vascular disease.

We are looking forward to seeing you there! For more information please visit our website: <u>https://nvfarmacologie.nl/</u>.

