Symphogen publishes discovery and pre-clinical data on first chicken-derived antibody to enter human clinical trials

- Sym021 a novel anti-PD1 compound currently in Phase 1 clinical trials

Copenhagen, 16 May 2019 – Symphogen, a private clinical stage oncology focused biopharmaceutical company with a productive antibody discovery engine and innovative immuno-oncology pipeline, announced today the publication of discovery and preclinical data on the first-in-man chicken-derived antibody directed at the immune checkpoint target PD1. The publication “Sym021, a promising anti-PD1 clinical candidate antibody derived from a new chicken antibody discovery platform.” by Gjetting T et al. appeared in the journal mAbs 2019; May 3: 1-15.

Chickens are evolutionarily more distant from humans than rodent species typically used to generate therapeutic antibodies. Symphogen has demonstrated that its humanized chicken-derived antibodies have unique properties compared to antibodies generated by traditional means. In the journal article authored by Symphogen scientists, detailed epitope mapping analysis showed that Sym021 bound to PD1 on a unique epitope distinct from the epitopes of the clinically approved PD1 antibodies pembrolizumab and nivolumab. In addition, Sym021 was demonstrated to have very high affinity to human PD1 and cross-reactivity with cynomolgus and mouse PD1. Mouse cross-reactivity is commonly sought for therapeutic antibodies, but rarely achieved by traditional methods of antibody generation.

Functionally Sym021 was shown to induce immune cell activation and tumor growth inhibition in various models of human cancer. Based on these promising results and positive findings from a Phase 1 clinical trial evaluating safety and tolerability of Sym021 monotherapy (Part 1), Symphogen has initiated Part 2 of the study where Sym021 is being evaluated in combination with either LAG3- or TIM3-targeted clinical antibody candidates, Sym022 or Sym023 respectively. Preclinical data have shown enhanced activity of such combined targeting.

“To the best of our knowledge, this is the first time a chicken-derived antibody has entered into clinical trials. We believe we have created a new antibody generation and humanization platform that delivers unique therapeutic antibodies and which has application across multiple therapeutic areas and targets including highly conserved targets” said chief executive officer of Symphogen, Martin Olin.

Sym021 is currently under development with Servier under a broad immuno-oncology (I-O) collaboration covering six separate programs.

About Symphogen’s antibody discovery platform
Symphogen’s unique platform for generation of high-quality therapeutic antibodies with rare functionalities is centered around its proprietary B-cell cloning technology Symplex®. Combined with the ability to express entire full-length antibody repertoires and the performance of high dimensional screening and next generation sequencing, Symphogen can rapidly identify unique drug leads with desired sets of properties.
About Symphogen's I-O programs
Symphogen’s research and development activities in the I-O area are focused on employing the Company’s antibody discovery platform to generate lead candidates against targets on various cells of the immune system demonstrated to be involved in regulation of anti-tumor immunity, such as T cells (PD1, LAG3 and TIM3) and dendritic cells (FLT3, AXL, CD40).

About Symphogen's collaboration with Servier
Under their agreement, Symphogen and Servier are advancing novel therapeutics against up to six immuno-oncology targets. On a product-by-product basis, following successful completion of Phase 1 clinical trials, Servier will have exclusive option rights to complete late-stage development and worldwide commercialization. Servier is an international pharmaceutical company, governed by a non-profit foundation, with headquarters in the Paris metropolitan area.

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About Symphogen
Symphogen is a private biopharmaceutical company focused in the field of discovery and early clinical development of antibody therapeutics for use in oncology and other significant diseases. Symphogen intends to commercialize its unique platform for generation of high-quality therapeutic antibodies with rare functionalities through partnerships, out-licensing or sale. The Company has collaborations for the development of antibody therapeutics in immuno-oncology with Servier and in the infectious disease area with Genentech.