



## Hookipa Biotech Announces Nature Communications Publication Showing TheraT<sup>®</sup> Turns Cold Tumors Hot

- Data shows TheraT<sup>®</sup> replicating viral vector platform based on LCMV delivers potent alarmin release
  - TheraT<sup>®</sup> mediated alarmin release crucial for active immunization in cancer immunotherapy

**Vienna, Austria, 26 May 2017** - Hookipa Biotech AG, a company pioneering a new class of immunotherapies for oncology and infectious diseases, today announces publication in leading peer-reviewed publication *Nature Communications*<sup>1</sup> of research data in a transgenic mouse model showing how its replicating viral vector platform TheraT<sup>®</sup> delivers potent innate immune activation including key alarmin signals.

Hookipa's CSO, Professor Daniel D. Pinschewer, M.D., of the Division of Experimental Virology, Department of Biomedicine, University of Basel, Switzerland, and senior co-author of the paper, said, "This key research data is the first publication on Hookipa's platform technology TheraT<sup>®</sup> (also referred to as artLCMV). The paper shows TheraT's tremendously potent anti-tumor effects and also the underlying molecular mechanism. Eliciting the most potent cytotoxic T cell responses is a crucial step in treating patients with aggressive cancers."

Hookipa's TheraT<sup>®</sup>, based on live-attenuated lymphocytic choriomeningitis virus (artLCMV), has been designed to harness the immune system to combat cancer. TheraT<sup>®</sup> works by delivering tumor-associated antigen-specific immunization alongside the release of the alarmin interleukin-33 (IL-33). IL-33 is a key driver of potent and protective CD8<sup>+</sup> cytotoxic effector T lymphocytes (CTL), and TheraT<sup>®</sup> is engineered to target stromal cells, which release IL-33 to trigger this alarmin pathway, providing a discriminating feature of TheraT<sup>®</sup>. The *Nature Communications* paper details experimental work in gene-targeted mice showing triggering of such IL-33 signals provides potent tumor immunotherapy.

Hookipa has an exclusive license to commercially exploit the unique novel cancer immunotherapy platform (TheraT<sup>®</sup>) developed by scientists at the University of Basel and University of Geneva.

Commenting on the publication, Hookipa's CEO, Mr. Jörn Aldag said, "With Hookipa's novel Vaxwave<sup>®</sup> and TheraT<sup>®</sup> platforms, the Company has a strong technology foundation. This publication in the high impact factor journal *Nature Communications* is another important milestone on our drive to deliver next-generation cancer immune therapeutics and vaccines to patients. We intend to start clinical development of an HPV<sup>+</sup> head and neck cancer program based on TheraT<sup>®</sup> in 2018".

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<sup>1</sup> Replicating viral vector platform exploits alarmin signals for potent CD8<sup>+</sup> T cell-mediated tumour immunotherapy – published online in *Nature Communications* on 26 May 2017  
<http://www.nature.com/ncomms/>

### **About Hookipa Biotech**

Hookipa Biotech is developing next-generation immunotherapies for infectious diseases and cancer using novel proprietary arenavirus vector platforms. By end April 2017, Hookipa has raised EUR 15 million in non-dilutive funds and EUR 37 million equity investment from internationally renowned venture capital investors including Sofinnova Partners, Forbion Capital Partners, Boehringer Ingelheim Venture Fund, Takeda Ventures and BioMedPartners. Additional information on Hookipa is available at [www.hookipabiotech.com](http://www.hookipabiotech.com).

### **About Vaxwave®**

Hookipa's Vaxwave® technology presents a completely new replication-defective viral vector platform designed to overcome the limitations of current technologies. Vaxwave® is based on lymphocytic choriomeningitis virus (LCMV) and in this vector the gene encoding the LCMV envelope protein, normally responsible for virus entry into target cells, has been deleted and replaced with a target gene of interest. The resulting vectors infect target cells and stimulate very potent and long-lasting immune responses, however they can no longer replicate and are therefore non-pathogenic and inherently safe.

### **About TheraT®**

Hookipa's TheraT® platform is based on an attenuated replicating virus and is capable of eliciting the most potent T cell responses - a crucial step in treating patients with aggressive cancers. Significant pre-clinical data demonstrates that TheraT® is a powerful modality capable of turning "cold tumors hot" which should result in an additional layer of efficacy in the fight against solid tumors. Specifically, TheraT® has proven to be safe in animals as well as capable of eliciting uniquely potent antigen-specific CD8+ cytotoxic T cell responses and strong tumor control in mice. The first clinical trial with HB-201 targeting human papilloma virus-induced head and neck cancer is currently being prepared. This immuno-oncology technology is further being leveraged to target tumor self-antigens or shared neoantigens.

Issued for and on behalf Hookipa Biotech AG by Instinctif Partners.

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