



## United States Patent and Trademark Office Issues Innate Biologics™ E3 Ligase Effector Protein Patent

First-of-Kind Cell Penetrating Anti-Inflammatory Platform, Covering Multiple Effectors, in Development as Dermatological, Osteoarthritis and Inflammatory Bowel Disease (IBD) Therapeutics

**PHILADELPHIA, PA — September 23, 2019** —Innate Biologics™ has been granted patent protection for its novel E3 Ligase recombinant protein platform that targets inflammatory signaling pathways.

The United States Patent and Trademark Office (USPTO) issued U.S. Patent No. 10,406,215 covering pharmaceutical compositions and kits containing novel constructs targeting the inflammatory cascade. The proprietary technology, based on Innate Biologics™ suite of E3 ubiquitin ligase cell-penetrating anti-inflammatory proteins, provides a platform for treatment of multiple inflammatory and autoimmune disorders. The patented constructs include bacterial E3 ubiquitin ligase effector polypeptides linked to a cargo molecule. The claims cover nine bacterial effector polypeptides that target specific components of the inflammatory cascade. Each of the recombinant E3 effectors has its own Protein Transduction Domain allowing for highly efficient, receptor-independent transport across a variety of mucosal cell membranes.

“Innate Biologics™ in collaboration with the University of Münster and other world-leading research institutes, has produced a wide range of highly targeted, novel, patient-friendly and potent biologics to regulate inflammatory signaling,” said Peter Mondics, CEO of Innate Biologics™. “There are a range of immediate potential therapeutic applications for our proteins, including new localized ways to address dermatological conditions like psoriasis, and its variants, and other age-related skin conditions – large markets with over 100BB in consumer spend.”

Innate Biologics™ has assembled a worldwide scientific team and patent portfolio, focused on cell-penetrating bacterial effector polypeptides. In pre-clinical studies, treatment with a single Innate Biologics™ effector, resulted in clear/measurable down-regulation of multiple pro-inflammatory cytokine signaling pathways. Along with Innate Biologics™’ E3 Ligase family comes the added capacity to modulate, and suppress immune-signaling pathways associated with a number of inflammatory conditions.

U.S. Patent No. 10,406,215, assigned to the University of Münster, was co-managed by and licensed exclusively to, Innate Biologics™. It is part of a patent family based on research done at the University of Münster, and Innate Biologics. This family of E3's also includes issued patents in Australia, and pending applications in Europe and Canada, to which Innate Biologics™ has exclusive worldwide rights.

Innate Biologics™ is commercializing the ability of these bacterial polypeptides to autonomously enter human host cells and suppress the host inflammatory response. As part of its research effort, it is developing novel constructs based on these polypeptides for treatment of inflammatory disorders. U.S. Patent No. 10,406,215 complements and expands Innate Biologics™ existing patent portfolio, which includes patents covering the cell-penetrating effector protein rYopM (covered by U.S. Patent No. 9,155,779) as well as multiple, recently-filed applications. Together, these patents and applications meaningfully expand the treatment scope and utility of Innate Biologics™ anti-inflammatory polypeptide effectors for use in multiple inflammatory conditions. The Innate Biologics™ effector polypeptides are being developed for oral, topical, intra-articular, and intravenous delivery to multiple body compartments and organ systems.

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## About Innate Biologics

Innate Biologics is a privately held company focused on therapeutics for targeting, treating, and preventing inflammation. Its first-of-kind, recombinant bacterial effector polypeptide platform, *Paired Protein Platform*™ specifically targets intracellular inflammatory signaling pathways. Innate Biologics holds a growing Intellectual Property Catalogue, along with Collaboration Agreements coupled to worldwide exclusive rights for a range of anti-inflammatory proteins including: full-length/optimized recombinant proteins, paired proteins and protein transduction domains. [www.innatebiologics.com](http://www.innatebiologics.com)

This press release contains “forward-looking statements” concerning the development of Innate Biologics, LLC’s products, the potential benefits and attributes of such products, and the company’s expectations regarding its prospects. These statements are based on the current beliefs and expectations of the company’s management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will be commercially successful. Forward-looking statements are subject to risk, assumptions, and uncertainties that could cause actual future events or results to differ materially from such statements. These statements are made as of the date of this press release. Actual results may vary. Innate Biologics, LLC undertakes no obligation to update any forward-looking statements for any reason.

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