

# FORBIUS

## **AVID200's Capacity to Reverse Bone Marrow Failure is Featured in an Oral Presentation at the 30th Annual Fanconi Anemia Scientific Symposium**

(September 29, 2018) - Forbius (Formation Biologics), a clinical stage biopharmaceutical company, announced that the laboratory of [Alan D'Andrea, M.D.](#), Dana-Farber Cancer Institute, Harvard Medical School, will give an oral presentation featuring AVID200, an isoform-selective TGF- $\beta$  inhibitor, at the 30th Annual Fanconi Anemia Scientific Symposium. Dr. D'Andrea recently demonstrated that overactive TGF- $\beta$  signaling is central in bone marrow failure in disorders such as Fanconi Anemia ([Zhang et al., Cell Stem Cell, 2016,18:668-81](#); [Tummala and Dokal, Cell Stem Cell. 2016 May 5;18\(5\):567-8](#)).

The presentation highlights the ability of AVID200 to rescue hematopoietic and clonogenic defects in Fanconi Anemia hematopoietic stem and progenitor cells (HSPCs). In *in vitro* and *in vivo* studies, treatment with AVID200 reduced the amount of DNA damage by inhibiting error-prone DNA repair pathways. This allowed for increased survival of human and mouse Fanconi Anemia HSPCs thus demonstrating the potential of AVID200 to reverse bone marrow failure.

Out of the three TGF- $\beta$  isoforms, TGF- $\beta$ 2 has been shown to be a positive promoter of hematopoiesis as well as normal cardiac function. AVID200 was therefore designed to selectively neutralize TGF- $\beta$  1 & 3 for optimal efficacy and safety. In the preclinical studies evaluating survival of *Fancc*2<sup>-/-</sup> cells, AVID200 exhibited superior activity compared to non-selective TGF- $\beta$  inhibitors. These findings demonstrate the benefits of AVID200 isoform selectivity as well as the potential of AVID200 to treat rare bone marrow failure disorders such as Fanconi Anemia, myelofibrosis, and Shwachman-Diamond Syndrome.

"We previously demonstrated that hyperactive TGF- $\beta$  signaling is a fundamental defect driving bone marrow failure in Fanconi Anemia and potentially other bone marrow failure disorders. Our findings demonstrate the benefits of AVID200 selectivity as well as its potential to rescue bone marrow failure in Fanconi Anemia and other high unmet medical need indications," commented Dr. D'Andrea.

### **About AVID200**

Forbius designed and developed AVID200 to be a highly potent and isoform-selective TGF- $\beta$  inhibitor. AVID200 is unique since it selectively neutralizes TGF- $\beta$ 1 and - $\beta$ 3 with pM potency, while at the same time being minimally active against TGF- $\beta$ 2. Blockade of TGF- $\beta$ 2 is undesirable because of the potential negative impact on hematopoiesis, normal cardiac function, and dissemination of metastasis. AVID200 is therefore positioned to be an effective and well-tolerated therapeutic in a variety of clinical settings. AVID200 is undergoing development for the treatment of fibrotic diseases, and as an immune oncology agent, with clinical trials beginning later this year.

### **About Forbius (Formation Biologics)**

Forbius is a clinical stage company that designs and develops biotherapeutics for the treatment of cancer and fibrotic diseases. Forbius' medicines are designed to radically transform patients' lives. We use our strength in biological understanding and diverse protein engineering technologies to design superior inhibitors of validated pathways. We have particularly deep expertise in targeting the transforming growth factor-beta (TGF- $\beta$ ) and epidermal growth factor receptor (EGFR) pathways. For both of these pathways, there is a significant body of evidence validating their role as drivers of multiple life-threatening conditions, including cancer and fibrosis. However, in the case of the EGFR pathway, the majority of patients do not benefit from currently marketed EGFR inhibitors; in the case of the TGF- $\beta$  pathway, no agent targeting this pathway has yet been approved. By using multiple complementary platform technologies, Forbius' team

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overcame barriers that prevented the development of effective therapeutics targeting these pathways. For more information, please visit [www.forbius.com](http://www.forbius.com).