



## Moderna Licenses New Vaccine Candidates Against a New Viral Target to Merck

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**Ongoing collaboration between Moderna and Merck is yielding rapid progress; First vaccine candidate anticipated to enter the clinic in 2016**

**CAMBRIDGE, Mass., January 11, 2016** — Moderna Therapeutics, a pioneer in the development of messenger RNA (mRNA) Therapeutics™, today announced that Merck, known as MSD outside the United States and Canada, has licensed a vaccine program against an undisclosed viral target, including mRNA 1566 and a set of related novel vaccine candidates, as part of the ongoing collaboration between the companies to discover and develop vaccines and passive immunity treatments against viral diseases using modified messenger RNA (mRNA). The inclusion of this new program, which was not part of the original collaboration agreement, follows the rapid progress made in the first year of the collaboration. Moderna's contribution is led by Valera, its infectious disease-focused venture.

"Since signing our first agreement in January 2015, the Merck and Moderna teams have accomplished something quite unprecedented in drug development. In just ten months, they were able to move an idea for a new vaccine from concept clear through to the nomination of a vaccine candidate that entered pre-clinical development in November 2015. That innovative vaccine candidate is anticipated to enter the clinic in 2016," said Stéphane Bancel, Chief Executive Officer (CEO) of Moderna. "I am very proud of the work of the teams over the past year. It is rewarding to see the remarkable success the collaboration has yielded thus far, as well as Merck's desire to pursue an additional strategically important target and develop more medicines together."

Under the terms of the amendment, Moderna has licensed a vaccine program against an undisclosed viral target, including mRNA 1566 and a set of related novel vaccine candidates to Merck. mRNA 1566 has shown promising results in early development efforts undertaken by the Valera team. Moderna will receive an upfront payment for this program and will be eligible to receive development, regulatory and commercial milestone payments related to the new target, as well as tiered royalties on net sales of resulting products. Consistent with the existing collaboration, Merck will lead the development of the candidate and commercialization of any products resulting from the agreement, while Moderna will design and synthesize the mRNA vaccine candidates directed against selected targets. As part of the initial three-year research agreement announced in January 2015, Merck made an upfront cash payment of \$50 million and a \$50 million equity investment to utilize granted licenses to commercialize five product candidates.

"The results generated by our initial efforts through this collaboration provide strong evidence for deploying Moderna's messenger RNA technology against important viral targets," said Daria Hazuda, vice president, Discovery, Infectious Disease and Vaccines, Merck Research Laboratories. "We are excited to add this new program to the focus of our agreement, and look forward to our continued work with the team."

Moderna's [pipeline](#) is composed of a series of novel drug modalities, each representing a distinct approach to using the company's novel mRNA expression platform to encode proteins that achieve a therapeutic benefit. Moderna's current modalities include infectious disease vaccines, personalized cancer vaccines, intracellular/transmembrane proteins, intratumoral cancer therapy, and secreted antibodies and proteins. Moderna is leveraging these modalities to advance drugs across a broad spectrum of therapeutic areas via its therapeutically focused ventures and its strategic partnerships. In addition to Valera, Moderna's ventures also include Elpidera, focused on rare diseases; Onkaido, focused on oncology; and Caperna, focused on personalized cancer vaccines.

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### About Valera, a Moderna Venture

Valera, a Moderna venture, is focused exclusively on the advancement of vaccines and therapeutics for the prevention and treatment of infectious diseases. Valera is leveraging Moderna's messenger RNA Therapeutics™ platform, an entirely new in vivo drug technology that produces human proteins, antibodies and entirely novel protein constructs inside patient cells, which are in turn secreted or active intracellularly. For more information please visit [www.modernatx.com/ventures](http://www.modernatx.com/ventures).

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### About Moderna Therapeutics

Moderna Therapeutics is a clinical stage pioneer of messenger RNA Therapeutics™, an entirely new in vivo drug technology that produces human proteins, antibodies and entirely novel protein constructs inside patient cells, which are in turn secreted or active intracellularly. This breakthrough platform addresses currently undruggable targets and offers a superior alternative to existing drug modalities for a wide range of diseases and conditions. Moderna is developing and plans to commercialize its innovative mRNA medicines through its own ventures and its strategic relationships with established pharmaceutical and biotech companies. Its current ventures include Valera (infectious diseases), Onkaido (immuno-oncology), Caperna (personalized cancer vaccines) and Elpidera (rare diseases). Founded by Flagship VentureLabs®, Cambridge-based Moderna is privately held and currently has strategic agreements with [AstraZeneca](#), [Alexion Pharmaceuticals](#) and [Merck](#). To learn more, visit [www.modernatx.com](http://www.modernatx.com).