

Austrianova initiates a collaborative project to prevent multiple myeloma progression

May 18, 2023 | News

Launches a partnership with San Raffaele University & Research Hospital on a co-development programme using Austrianova's patented Bac-in-a-Box® technology



Austrianova and San Raffaele University & Research Hospital, Milan, Italy have just announced the initiation of a Joint Development Programme with the aim of creating a treatment to prevent the progression of multiple myeloma to full blown disease.

The group of Dr. Matteo Bellone, leader of Cellular immunology Unit at San Raffaele University & Research Hospital, has shown that *Prevotella melaninogenica*, a commensal bacterium of the human gastrointestinal microbiota, can protect against the progression of relatively benign asymptomatic multiple myeloma to the aggressive form of the disease. Delivery of *Prevotella melaninogenica* in preclinical animal models prevents this progression (Calcinotto et al., 2018) but large doses of the bacteria are needed since they must survive passage through the strongly acidic environment of the stomach.

Austrianova, a Asian biotech company operating in Singapore and Thailand, has developed its patented Bac-in-a-Box® technology specifically to efficiently protect bacteria from stomach acid as well as to allow storage at room temperature without appreciable loss of viability.

This collaboration builds on San Raffaele Hospital's dedication to technology transfer, the process of partnering with industry to successfully translate research results into medical benefits.

Dr. Bellone said: "Most patients affected by smouldering myeloma live in anxiety because they know the disease may easily evolve into an untreatable phase, but they are offered no preventive cure. Taking a probiotic positively impacts disease progression in animal models and might indeed help these patients. We are eager to test Austrianova technology in our models. This will be the first step to the clinic."

Prof. Walter H. Gunzburg, Chairman of Austrianova, stated: "The Austrianova team is working with team at San Raffaele hospital to work on the strategies to hamper the full progression of blood cancer. Our Bac-in-a-Box® technology can efficiently store and deliver bacteria to the gastric tract and we look forward to applying it to the delivery of *Prevotella melaninogenica* to hopefully prevent progression of multiple myeloma in patients."