

Section: Research & Development

# Seattle Genetics and Agensys Expand Cancer Collaboration

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**Seattle Genetics and Agensys, an affiliate of Astellas, have announced the expansion of their 2007 collaboration on antibody-drug conjugates to treat cancer targets. Seattle Genetics gets an upfront payment of US\$12 M with the potential to earn up to US\$350 M.**

In January 2007, Seattle Genetics and Agensys entered into a collaboration to jointly develop an antibody-drug conjugate (ADC), designated as ASG-5ME on a 50-50 basis (Deal no. 26211). Other provisions in the agreement were that Agensys could obtain three exclusive ADC licenses and Seattle Genetics could opt to co-develop and commercialise any one of these programmes at the IND submission stage again on a 50-50 sharing basis. Seattle Genetics would be entitled to receive fees, milestones and royalties on ADC programs solely developed and commercialized by Agensys.

The two companies have now expanded the terms of the 2007 agreement; Agensys can obtain exclusive ADC licenses for multiple targets by paying US\$12 M upfront. Seattle Genetics gets a 50-50 sharing option on a third ADC programme at the IND filing stage. The other ADC programmes will be developed and commercialized by Agensys for which Seattle Genetics would get fees, milestone payments and royalties on worldwide sales. Success in these additional ADC programmes would bring US\$250 M in milestones and US\$100 M in royalties to Seattle Genetics.

Agensys specializes in developing fully human monoclonal antibodies to treat solid tumour cancers. It has a large portfolio of targets covering 14 types of solid tumours, protected by 190 patents and 300 applications. Currently, three fully-human monoclonal naked antibodies are under trials: the first for prostate, pancreatic and bladder cancers; the second for kidney and liver cancers; and, the third directed towards an ovarian cancer target. ADC products utilize Seattle Genetics' proprietary technology and the first joint product ASG-5ME, which is planned for Phase I trials in 2010, has potential in the treatment of several types of solid tumours.

Seattle Genetics' ADC technology employs synthetic, highly-potent drugs attached to antibodies through proprietary linker systems. The linkers are stable in the bloodstream and release the drug payload after getting inside the target cells. Non-target cells are not affected and the patient is relieved of toxic side effects. The company has six candidates under going trials. Apart from ASG-5ME, reflected in the Agensys collaboration, the main drug candidate is SGN-35 (brentuximab

vedotin), which is in clinical trials under special protocol assessment with the US FDA for relapsed and refractory Hodgkin lymphoma in addition to other CD30 hematological malignancies. The second ADC programme, SGN-75, is in Phase I from November 2009 and has shown promise in a wide range of cancers. SGN-40 (dacetuzumab) is being co-developed with Genentech, now part of Roche, for treating non-Hodgkin lymphoma in combination with Rituxan® (rituximab) (Deal no. 26212).

The ADC technology has provided Seattle Genetics with a number of collaborations with leading biotech and pharma companies that include Bayer, CuraGen, Progenics, MedImmune, Daiichi Sankyo and Millennium of the Takeda Group. Significantly, three of its partners are Japanese companies. The technology continues to bring in money and expands the company's ADC pipeline for the oncology sector. Since Agensys already has seen positive results from the earlier 2007 deal, its management probably views this expansion as an added benefit to the oncology pipeline of Astellas Pharma, of whom it is an affiliate (Deal no. 29092).