ABSTRACT
Celyvir, the combination of mesenchymal cells (MSCs) that carry the oncolytic adenovirus ICOVIR-5, is an advanced therapy medicine developed over the last decades. Continuous improvement of the technique are in progress.

DESCRIPTION
Oncolytic viruses (OV) kill tumor cells via an immunogenic cell death and autologous/allogenic MSC, injected intravenously, would be used to home virus into tumors and can also be used to deliver specific toxic, therapeutic or immunomodulatory genes to tumor cells. Celyvir development program has completed the first-in-human, first-in-child Phase I trial (EudraCT number: 2008-000364-16) in eight adult and nine pediatric patients that was published in Molecular Therapy (doi:10.1016/j.ymthe.2020.01.019). Now, we have the approval for a new Phase I trial using allogenic MSC and other improvements of our therapy (EudraCT number: 2019-001154-26). Our clinical data indicate that the combination of MSCs and oncolytic adenovirus is a safe treatment, and thus can be administered intensively. Continuous improvements of Celyvir are in progress by using new modified cells and viruses and performing veterinary clinical trials in dogs.

KEYWORDS
Celyvir, tumor, cancer, oncolytic virus, MSC, mesenchymal stem cell, immunotherapy, advanced therapy

INNOVATIVE ASPECTS
Combination products based on modified cells and viruses that improve efficacy.

COMPETITIVE ADVANTAGES
- Patent application on some of the improvements.
- Highly experienced research group.

MAIN SECTOR OF ACTIVITY
The offer may be of interest in the health and pharmacist field mainly in the cancer immunotherapy area.

DEGREE OF DEVELOPMENT
- Tested in vitro, animal models and veterinary trials.
- Phase I trials undertaken successfully.

COLLABORATION EXPECTED
Licensees interested in collaboration agreements for technology development.