Background Therapeutic vaccines represent a good alternative for active immunotherapy and are particularly used in the treatment of cancers, autoimmune diseases, and certain chronic infectious diseases. For those vaccines, the use of well defined over expressed self antigens is linked with weak and short term immune response. To enhance the quality of the vaccines in terms of immune response and stability, oily adjuvants can be used.

Methods Indeed, GMP grade oily adjuvants such as MONTANIDE™ ISA 51 VG from Seppic are widely used in humans to formulate stable water-in-oil emulsions based vaccines. When injected, water-in-oil vaccines create a depot effect at the injection site and allow a slow and prolonged release of the antigen. It results in strong activation of CD8+ and CD4+ cells and production of cytokines.

Results MONTANIDE™ ISA 51 VG is mostly used in immunotherapy for the development of cancer vaccines and has been administered to more than thirty thousands patients worldwide. Thus, this adjuvant has a strong safety database in which local and general adverse events observed are mild to moderate and generally transient, and refer to headache, local pain or redness at injection site.

Conclusions In conclusion, MONTANIDE technology is a well-known ready-to-use adjuvants platform. It has been proven to be safe and potent thanks to their widely used in clinical trials worldwide for more than thirty years. MONTANIDE adjuvants are also suitable for registration by agencies as MONTANIDE™ ISA 51 VG is used in a licensed vaccine against non-small cell lung cancer, called the CIMAvax-EGF®, registered in eight countries so far.

http://dx.doi.org/10.1136/jitc-2023-SITC2023.1404