Founded in 2009, Adjuvance Technologies is a privately-held clinical-stage biopharmaceutical company driven by a mission to empower health through fundamental advances in adjuvant design, vaccine development, and manufacturing. We have developed the ability to synthesize next-generation saponin adjuvants and are using them as the basis of developing new combination adjuvants and new adjuvanted vaccines.

Our lead adjuvant **TQL-1055** is a rationally designed, novel analogue of the saponin adjuvant QS-21 designed for improved tolerability and to provide the same strong immune response compared to QS-21. With TQL-1055 as the foundation, Adjuvance is designing a platform of new combination adjuvants, each targeted toward different immune responses.

TQL-1055 has demonstrated promising Phase 1 clinical results in pertussis. Our vaccine development pipeline includes pertussis and herpes zoster candidates.

Adjuvance Technologies is partnering with leading vaccine developers who benefit from our next-generation adjuvants to advance vaccines in multiple therapeutic areas including infectious disease, oncology, allergy, and neurobiology. Adjuvance has initiated partnerships with more than 20 companies and academic institutions exploring the use of its adjuvants.

Adjuvance has received $3.5 million in grants from the U.S. National Institutes of Health that have been used for pre-clinical research in pertussis, influenza, tuberculosis and COVID-19 vaccine development. After raising seed money through dedicated angel investors, Adjuvance received $20 million in Series A financing from Morningside Venture Investors in August 2019.

Saponin Adjuvants

Saponin adjuvants are potent immune stimulators typically derived from soapbark trees (*Quillaja saponaria*).

Saponin adjuvants QS-21 and Matrix-M® are manufactured using natural material harvested from the inner lining of the bark of *Quillaja saponaria* tree, resulting in a terminal harvest. While important advances have been made in harvesting the raw materials, there remain critical limits to the availability of trees and sustainability of raw material supply.

QS-21 is combined with the toll-like receptor (TLR) 4 agonist monophosphoryl lipid A (MPL) to create the AS01 adjuvant.

Saponin adjuvants have been studied in human clinical trials for decades and are widely recognized as potent immune system stimulators; however, their development has been limited by a high level of adverse events after vaccination. Some saponin-adjuvanted vaccines are associated with more local and systematic reactions than those with other adjuvants or non-adjuvanted vaccines.

Saponin adjuvants are critical components in vaccines in clinical development for COVID-19 and flu and the AS01 adjuvant is included in licensed vaccines for shingles and malaria.

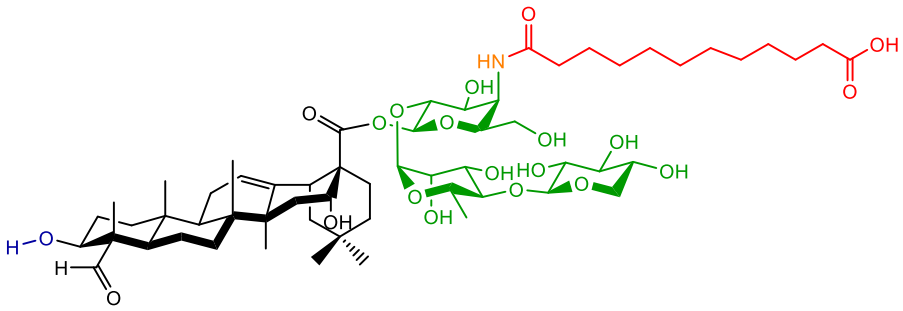


Figure 1 TQL-1055

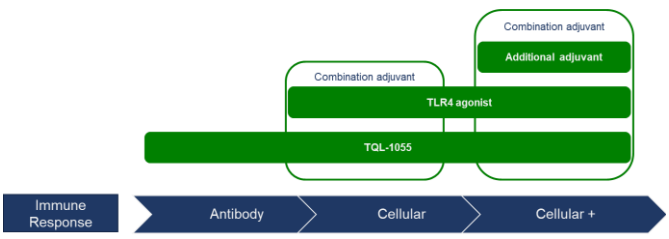
TQL-1055

Our lead candidate is the semi-synthetic saponin adjuvant TQL-1055, an analogue of QS-21. It retains the desirable properties of QS-21, and eliminates several challenges associated with QS-21. A fundamental benefit is that TQL-1055 is a semi-synthetic molecule starting with a natural triterpene core and using controlled structural modifications at the molecular level for completion. TQL-1055 synthesis uses raw material from leaves and branches of the *Quillaja saponaria* tree, making its harvest sustainable and available in greater quantities than the source material for other saponin adjuvants. The rational design of TQL-1055 allows Adjuvance to:

- Eliminate a section of QS-21 associated with adverse events
- Substitute a stronger chemical bond, making TQL-1055 more stable than QS-21
- Simplify two sections of TQL-1055 making the synthesis more efficient

Combination Adjuvants

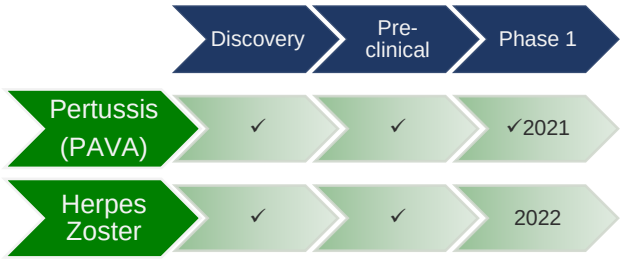
Building from the foundation of TQL-1055, our adjuvant platform includes several combination adjuvants, each designed to evoke specific types of immune responses and for use in different therapeutic areas.



TQL-1055 is anticipated to have many advantages as a vaccine adjuvant including scalable, sustainable, and efficient manufacturing, potent immunostimulatory properties, and improved tolerability compared with other saponin adjuvants.

Vaccine Pipeline

Adjuvance is building a pipeline of candidate vaccines using our adjuvants. We have progressed development of improved acellular pertussis and herpes zoster vaccines and are planning a Phase 1 study of our zoster vaccine in 2022. Adjuvance may seek out-licensing partners to continue the development or commercialization of these vaccines.



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