PHOSPHOLIGANDOME ANALYSIS OF CRC PATIENT TISSUES

- Robust enrichment methodology coupled to highly-sensitive mass spectrometric instrumentation
- Workflow allows for routine identification of low-level phosphopeptides from CRC patient tumor tissues

PHOSPHOPEPTIDE TUMOR TARGETS

- PTTs are assigned to HLA haplotypes through predictive algorithms and binding assays
- APTT presentation varies among alleles and patients
- HLA-B07 is consistently a strong presenter of PTTS

CONCLUSIONS

The development of a novel PTT-based vaccine for CRC may improve efficacy outcomes compared to standard-of-care treatments.

Phospholigandome analysis of a diverse subset of CRC patient tumors allowed for selection of novel targets for immunotherapeutic development.

The inclusion of highly-prevalent, multiple allele-associated epitopes from diverse source proteins expands the eligible patient population and increases the likelihood of stimulating an effective anti-tumor immune response.

Furthermore, the shared frequency observed in the PTT repertoire allows for advancement towards the development of an off-the-shelf cancer vaccine with broad therapeutic potential. Additional PSV™ formulations are in development for AML and a variety of solid tumors – including lung, cervical, head & neck, and ovarian cancers.