

## Appendix 1 Detailed search strategy example

### *PubMed*

#1 “biomarker”[Mesh]

#2 “digestive system cancers” [Mesh] OR “gastrointestinal cancers” [Mesh] OR “esophageal cancer” [Mesh] OR “gastric cancer” [Mesh] OR “colorectal cancer” [Mesh] OR “liver cancer” [Mesh] OR “hepatocellular carcinoma” [Mesh] OR “pancreatic cancer”

#3 “Immune checkpoint inhibitor” [Mesh] OR “programmed cell death protein 1” [Mesh] OR “programmed cell death ligand-1”

#4 #1 and #2 and #3