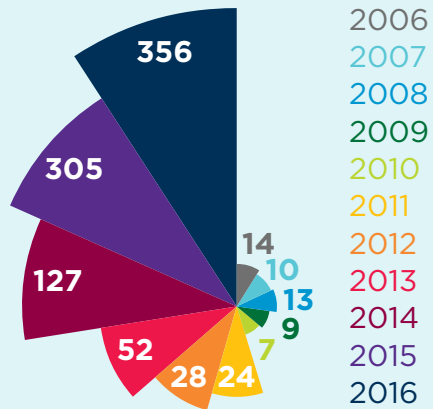


IMMUNO-ONCOLOGY MOVES FAST

945 immuno-oncology studies over the last **10** years



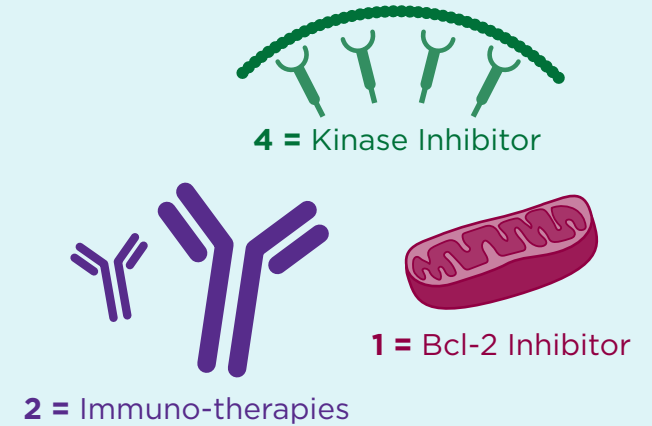
Rapid approvals

Pembrolizumab: Metastatic melanoma
only 3 years after Phase II studies began



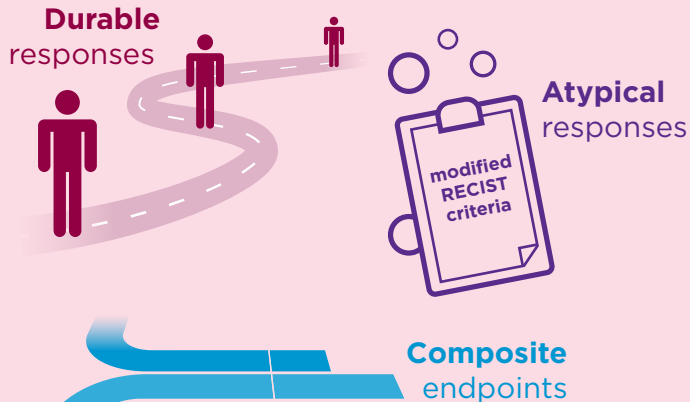
Pembrolizumab: Metastatic PD-L1+ NSCLC with a companion diagnostic test, followed **just 1 year** later

Q1-Q3 2016 7 oncology breakthrough therapy designations



IMMUNO-ONCOLOGY CLINICAL TRIALS

Immuno-therapies need novel endpoints



IMMUNO-ONCOLOGY ADVERSE EVENTS

Immune-related AEs **must be managed appropriately** by **trained investigators** via monitoring programs

