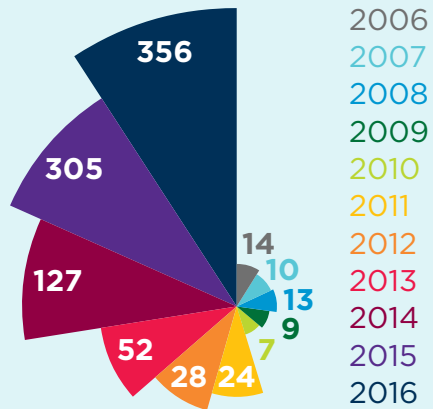


## IMMUNO-ONCOLOGY MOVES FAST

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



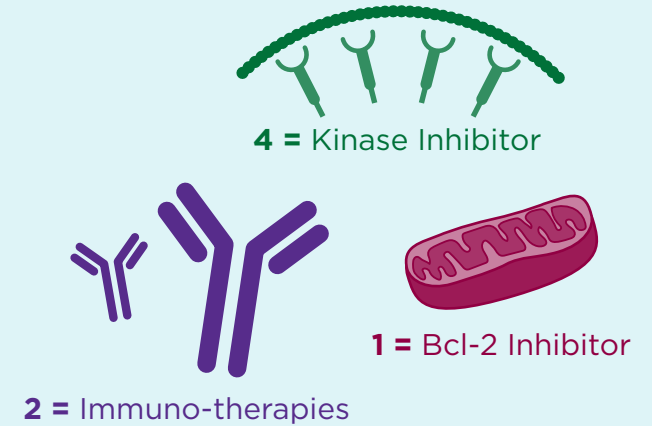
## Rapid approvals

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



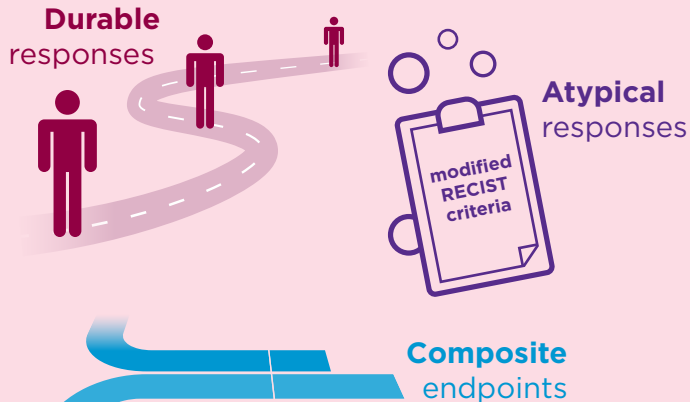
**Pembrolizumab:** Metastatic PD-L1+ NSCLC with a companion diagnostic test, followed **just 1 year** later

**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

