



Table I Recent Approvals (2015 – 2018) Based on Imaging

Drug; company	Cancer Type	Mechanism	Measurement	Trial & Endpoints
Calquence (acalabrutinib); AstraZeneca	Mantle cell lymphoma	Bruton's tyrosine kinase inhibitor	Lugano	NCT02213926 124 patients Primary endpoint = ORR
Aliqopa (copanlisib); Bayer Healthcare Pharmaceuticals	relapsed follicular lymphoma	PI3K inhibitor, α and δ isoforms	Cheson	NCT 01660451 104 patients Primary endpoint = ORR
Braftovi (encorafenib) with Mektovi (binimetinib); Array Pharmaceuticals	Melanoma	BRAF kinase inhibitor (encorafenib); MEK inhibitor (binimetinib)	RESIST 1.1	NCT01909453 383 patients Primary endpoint = PFS Secondary endpoints = OS, ORR, duration of response
Lutathera (^{177}Lu dotatate); Advanced Accelerator Applications	Gastro-entero-pancreatic-NETs	radiolabelled somatostatin analog	RESIST 1.1	NCT01578239 229 patients Primary endpoint = PFS Secondary endpoint = ORR
Talzenna (talazoparib); Pfizer	HER2-negative breast cancer with BRCA1 or BRCA2 mutations	poly(ADP-ribose) polymerase inhibitor	RECIST 1.1; BRACAnalysis CDx test (Myriad Genetics)*	NCT01945775 431 patients Primary endpoint = PFS Secondary endpoint = ORR
Lartruvo (olaratumab) used with doxorubicin; Eli Lilly and Company	soft tissue sarcoma	Platelet-derived growth factor receptor alpha	RECIST 1.1	FDA Drug Trial Snapshot 133 patients Endpoints = PFS, OS, ORR
Cotellic (cobimetinib) used with vemurafenib Genentech	melanoma	MEK inhibitor	RECIST 1.1	FDA Drug Trials Snapshot 495 patients Primary Endpoint = PFS Secondary endpoints = ORR, OS

* Approved by FDA as a diagnostic