Table S1

Study intervention	Phase	Study design	Status	Estimated completion date	Estimated enrollments	Patients setting	Primary outcomes	ClinicalTrials.gov identifier
MLN0128 in combination with FUL	II	Randomized open-labeled	Recruiting	May-2018	153	Postmenopausal women with ER+/HER2- ABC or MBC resistant to AI	PFS	NCT02756364
MLN0128 in combination with EXE or FUL	I/II	Non-randomized open-labeled	Recruiting	Dec-2018	128	Postmenopausal women with ER+/HER2- ABC or MBC resistant to Everolimus in combination with EXE or FLU	AE, CBR	NCT02049957
TAK-228 and Tamoxifen	II	Single arm open-labeled	Recruiting	Aug-2019	28	Women with ER+/HER2- breast cancer	Ki67 score	NCT02988986
TAK-228 and TAK-117 followed by cisplatin and nab-Paclitaxel	II	Single arm open-labeled	Recruiting	Jun-2022	20	Women with TNBC resistant to AC-T chemotherapy	RR	NCT03193853
MLN0128 and MLN8237	I	Non-randomized open-labeled	Recruiting	Nov-2018	56	Advanced solid tumor or metastatic TNBC received first-line treatment	MTD	NCT02719691
TAK-228 followed by Letrozole and TAK-228 as neoadjuvant therapy	I	Single arm open-labeled	Recruiting	Dec-2019	13	Postmenopausal women with ER+ breast cancer without metastasis	TRAE	NCT02619669
TAK-228 with carboplatin and paclitaxel	I	Single arm open-labeled	Recruiting	Mar-2024	50	Patients with solid tumor relapced after standard thearpy	MTD	NCT03430882

Abbreviactions: ABC, advanced breast cancer; AE, adverse side effect; CBR, clinical benefit rate; ER, estrogen receptor; EXE, excemestane; FUL, fulvestrant; HER2, human epidermal growth factor receptor 2; LET, letrozole; MBC, metastatic breast cancer; MTD, maximamu tolerated dose; PFS, progression free survival; RR, response rate; TNBC, triple negative breast cancer; TRAE, treatment related adverse event