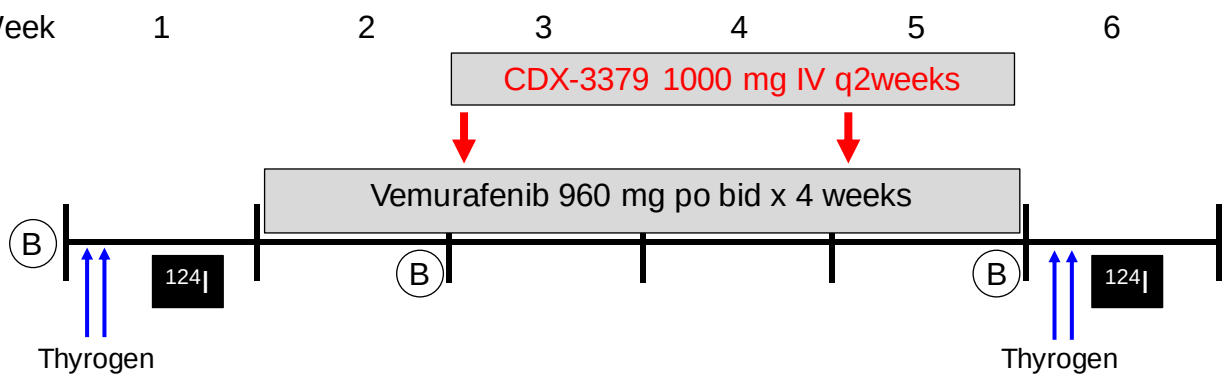
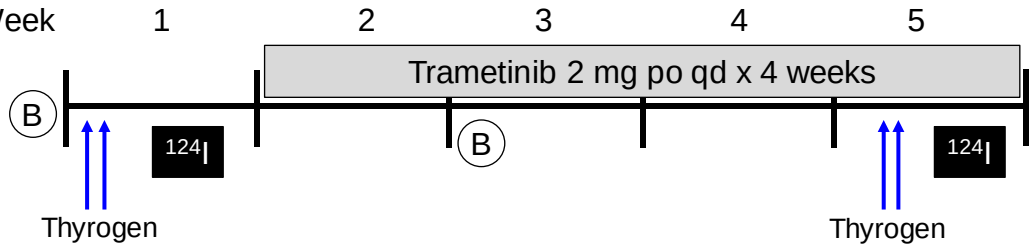
A



B



C

Trial	Patient	Classification	Driver mutation	SWI/SNF mutation	Other mutations
NCT02456701	P1	Responder	BRAF V600E	--	TERT, CD274 L190V
	P2	Non-responder	BRAF V600E	ARID2 Q1318*, Q1462*	APC P119A, HIS1H3D E98Q, MDC1 P342S, TERT, TSHR V558M
NCT02152995	P3	Responder	HRAS Q61R	--	EIF1AX X113_splice, TERT
	P4	Non-responder	NRAS Q61R	ARID1A S1791*	NKX2-1 amp, TBX3 amp
	P5	Non-responder	NRAS Q61K	SMARCB1 HOMDEL	SH2B3, CHEK2, NF2, EP300, CRKL, MAPK1, RAC2 DeepDel (22q11-12, 12q24 del)
	P6	Non-responder	NRAS Q61R	SMARCB1 D367E	TERT, VHL R167Q

Supplementary Figure S13: Schema of redifferentiation trials. (A) Schema of redifferentiation trial NCT02456701 in patients with *BRAF*-mutant RAI refractory thyroid cancers. After a baseline rTSH-stimulated ^{124}I PET scan, patients were treated with vemurafenib orally for 5 weeks combined with CDX-3379 administered intravenously every 2 weeks starting the second week of treatment. Patients were re-evaluated with a second rTSH-stimulated ^{124}I PET scan while on the drug combination. Research biopsies (Ⓑ) were performed before treatment, on vemurafenib, and on vemurafenib + CDX-3379. (B) Schema of the redifferentiation trial design NCT02152995 in patients with *RAS*-mutant RAI refractory thyroid cancers. After a baseline rTSH-stimulated ^{124}I PET scan, patients were treated for 4 weeks with trametinib and re-evaluated with a second ^{124}I PET scan. (C) Mutational profiles of thyroid cancer patients shown in Fig 6.