

# Sample ID format for NGS data (v5.33)

2022\_11\_17

Lei Wei

# Full sample ID

BRC001-T(N)d(rmcxbavp)1a-ESc1\_RS-01516230-RS-01516231\_PT-00090080\_WGS-ILU

## ■ BRC001-Td1a (publication ID)

### Cohort and patient

**BRC** : publication cohort name, to be determined by PI. For sequential projects of same disease, it is recommended to distinguish them by letter ("a,b,c") instead of number to avoid confusion with *patient publication number*.

**001** : patient publication number, to be determined by the PI

### Sample type and source

**T** : primary tissue type, T (tumor or test) or N (normal)

**d** : tissue type source, **d**(primary diagnosis), **r**(relapse), **m**(metastasis), **c**(cell line), **x**(xenograft), **b**(blood), **a**(adjacent normal tissue), **n**(non-adjacent normal tissue), **s**(stem cell), **v**(saliva), **p**(plasma), **f**(fluid), **t**(treatment). Can have multiple, e.x. **cx** (cell line derived xenograft), **s**(simulated), **o**(organoid)

**1** : if there are multiple tumors/normals, 1, 2, 3...

**a** : if a tumor contains multiple sites, a, b, c... Extra digits are allowed (e.x. a**1**, a**2**..)

Section **d1a** is optional depending on design of publication.

### Additional procedure (optional)

An extra tag ("ESc1" in the example) can be added to label additional procedure(s) performed to the sample. The tag uses capital letter(s) to indicate the type of procedure, and lower letter(s) and/or number(s) as flexible identifier.

**ES** : additional procedures. Currently allow: **C**(culture, usually include cutting up the tissue into tiny pieces), **D**(dissociated spheres), **E**(stem cells), **S**(single cells, e.x. by C1 system), **T**(treatment), **F**(fluorescence), **K**(spike in other sample), **U**(UMI), **R2**(rerun #2). When there are multiple procedures, the letters are ordered by alphabetical order to ensure uniqueness.

**c1** : flexible identifier which is optional. The PI can use any combination of lower letter(s) and/or number(s).

## ■ RS-01516230

- 2014\_01\_03: if there are multiple libraries, then all RS ids will be shown in this field, separated by dashes (e.x. RS-01516230-RS-01516231)

## ■ PT-00090080 (patient ID or cell line name for tracking across multiple diseases)

## ■ WGS-ILU (sequencing platform)

- WGS, WES, RNA, CUS (customized capture sequencing)
- ILU (Illumina), ION (Ion Torrent), SOD (Solid), 454, PAC (Pac bio) ...
- In publications to compare multiple platform, it is legal to use sequencing platform as a 'Additional procedure' (see above) to differentiate samples. E.x. "EVNC001-Td1-WES" vs "EVNC001-Td1-CUS"

# Overview of project

	Purpose	Samples	Conditions	Sample
aim1 (human wide)	establish narrow panel	375 samples from 25 donors (discover) + 225 sample from 15 donors(validation)	-	normal epidermis SE/NE, dermis
mouse tumor	establish wide panel	SKH1 CSCC tumors	-	CSCC T/N
aim1(mouse wide)	establish narrow panel	480 samples from 8 mice	UVB Doses(4)	normal epidermis SE/NE, dermis
aim1K&2(human narrow)	kinetics by age	1160 samples from 40 donors(discover)+580 samples from 20 donors(valid)	Age groups (4)	CSCC T/N, epidermis SE, dermis
aim1K(mouse narrow)	kinetics by dose	208 mice x 8 samples/mice	UVB Doses(3)/Weeks(5), before/after FT	CSCC T/N, epidermis SE, dermis
aim 2(human narrow)	CM vs cancer risk	408 samples from 17 pts x 3 + validation: 80 samples	high/low risks/BCC not CSCC	CSCC T/N, epidermis SE, dermis
aim2(mouse narrow)	CM vs cancer risk	70 mice x 8samples/mice	UVB Doses(11)/Weeks(1)	CSCC T/N, epidermis SE, dermis
aim 3 (mouse narrow)	field treatment efficacy	192 mice x 8 samples/mice	ALA(2), 5FU(2), control	CSCC T/N, epidermis SE, dermis
aim 3 (human narrow)	field treatment efficacy	300 samples	before/after FT	CSCC T/N, epidermis SE, dermis
aim 4 (mouse narrow)	photoprotection	160 mice/880 samples	UVB Dose(3)/Weeks(3)/SPF(3)weeks(3)	CSCC T/N, epidermis SE, dermis

# Potential types of information to include

Potential conditions	add to ID
human/mouse	cohort ID (h/m)
Primary tissue type	S (skin), B (Bladder),
Secondary tissue type	p (epidermis) vs d (dermis)
Third tissue type	e (sun-exposed) vs n (non-exposed)
Biopsy #	1-?
UVB doses	uv,1-11 ("uv1")
weeks	w, ("w1")
field treatment (ALA)	fta, ("fta11"-level1 before, "fta22"-level 2 after)
field treatment (5FU)	ftu, ("ftu11"-level1 before, "ftu22"-level 2 after)
sun screen	ss, ("ss11"-level1 before, "ss22"-level 2 after)
risks	-
wide/narrow sequencing	sequencing platfrom(UTSw/UTSn)
discovery/validation	-

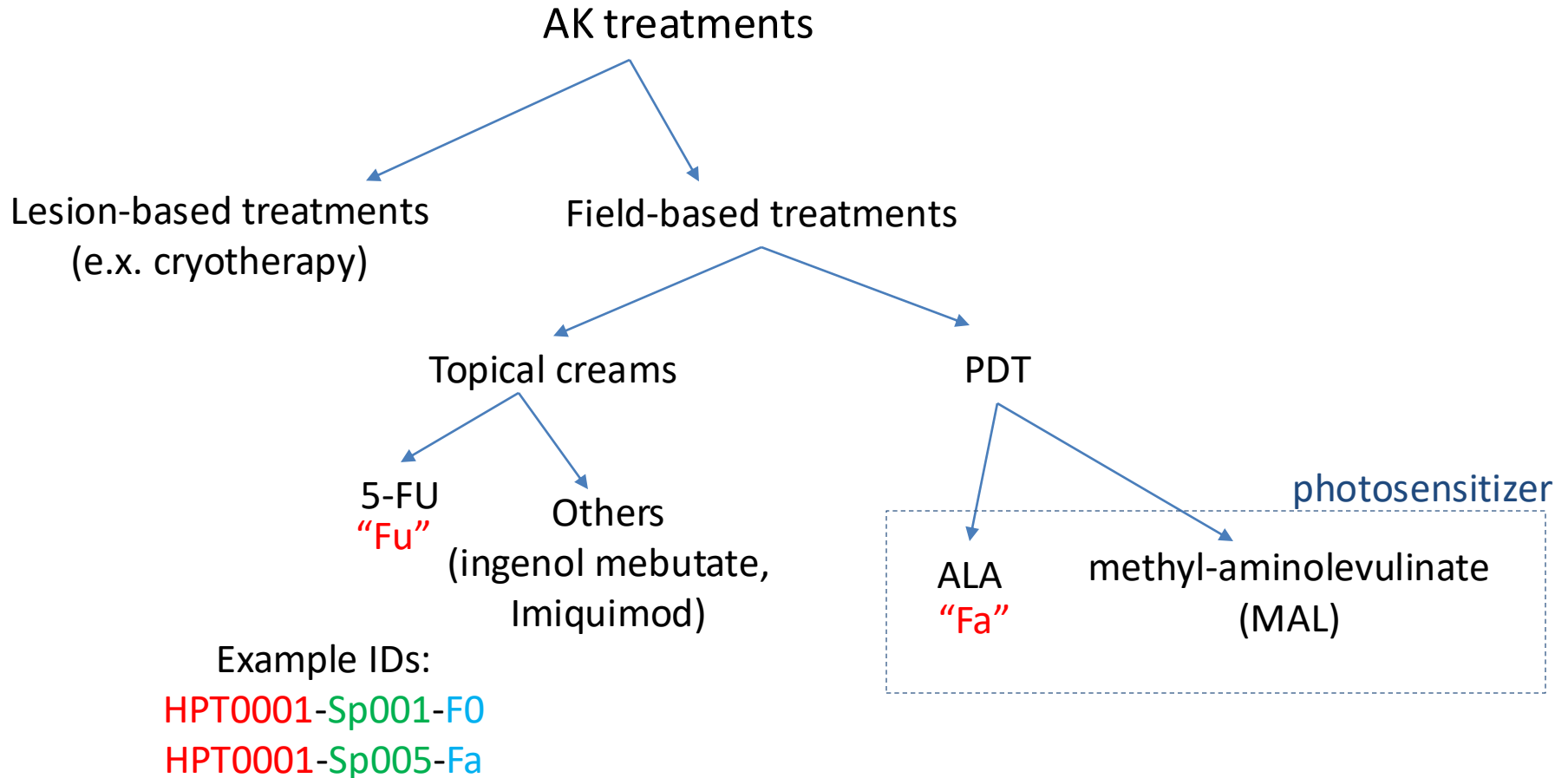
Pub ID
NGS ID

SCMm0001-Spe008-Us125w2Fu125w06Sm05w06Mc15w10\_UTSn\_PT#\_RS#(s).bam

Capitalize – primary variable

fixed	Patient	Information	Examples	Letter
		Project	SCM (skin clonal mutation)	CAPITAL
		Species	h-homo sapiens; m-mous	lower
	Sample	Donor	0001 (4-digits)	numeric
		Primary tissue site	S (skin), P (prostate)	CAPITAL
		Secondary tissue type	p (epidermis, normal) vs d (dermis, normal) vs t (tumor, clinically), vs pz for peripheral zone and tz for transitional zone (prostate)	lower
		Third tissue type (area)	e (sun-exposed) vs n (non-exposed)	lower
Biopsy #	015 (3-digits, multiple biopsies of the same area)	numeric		
flexible by project	Treatment	format: type (capital/lower letters) followed by value (numeric, as delimitator)		
		UV irradiation type with dose (uvb or uva or ss; 3digits for dose)	Ub (Uvb); Ua(Uva); Us (Us solar simulator),e.x. Us125	Capital first letter + lower+numeric
		Treatment weeks (2 digits)	w, ("w06")	lower+numeric
		Field treatment (needs to be followed by type and length except for F0)	F0-no field treatment; Fa (ALA); Fu (5FU); Fc (carevdiol), F (combination?)	Capital first letter + lower+numeric
		field treatment length (weeks)	w, ("w06")	lower+numeric
		Spf: sun screen, types?	"m" for mock sun-screen, or "s" for sun-screen, followed by a 2-digit numeric (e.x. 05), "Ss05"	lower+numeric
		sun screen length (weeks)	w, ("w06")	lower+numeric
		Immunosuppression	"c" for cyclosporine, "a" for azathioprine, "m"-mycophenolate mofetil, "s"-sirolimus, dose-numeric, e.x. "Mc15"	lower+numeric
		length (weeks)	w, ("w10")	lower+numeric
NGS		wide/narrow sequencing	sequencing platform(UTSw/UTSn/WES)	CAPITAL+lower

# Question for field treatments



Future: Fc (carevdlol), F (combination?)