Log ratio changes: Biliary-AdenoCA nucleotidesubstitution1 C>A C>G C>T 0.4 -0.2 --0.2 **-**-0.4 logR change NonInf T>C T>A T>G 0.4 -0.2 --0.2 **-**-0.4 **-Patients**

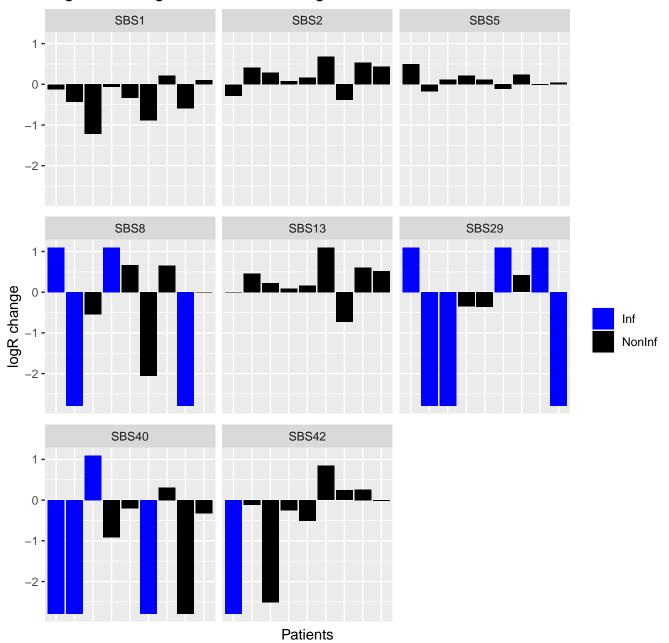
Log ratio changes: Biliary-AdenoCA signatures SBS1 SBS2 SBS3 SBS6 SBS5 2 --2 **-**SBS12 SBS13 SBS17b SBS8 SBS9 -2 **-**Inf SBS21 SBS22 SBS25 **SBS18** SBS24 NonInf 2 -SBS26 SBS32 SBS40 SBS44

logR change

Patients

Log ratio changes: Bladder-TCC nucleotidesubstitution1 C>A C>G C>T 0.5 -0.0 --0.5 **-**-1.0 logR change NonInf T>C T>G T>A 0.5 -0.0 --0.5 **-**-1.0 **-**-1.5 **-Patients**

Log ratio changes: Bladder–TCC signatures



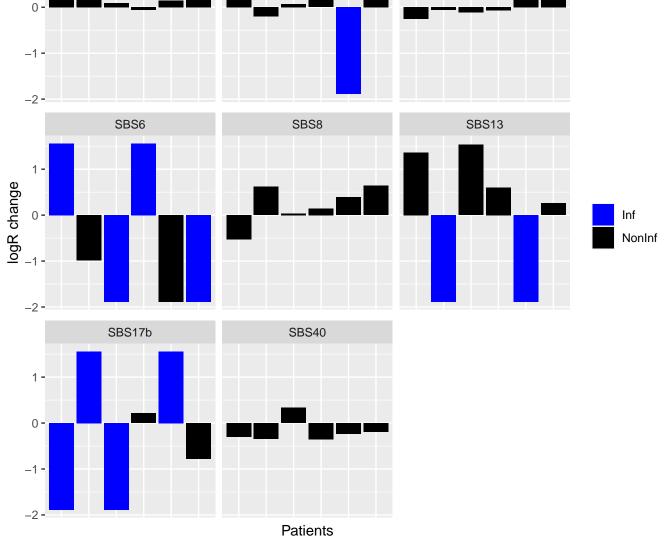
Log ratio changes: Bone-Benign nucleotidesubstitution1 C>A C>G C>T 0.2 -0.0 --0.2 **-**-0.4 logR change NonInf T>C T>G T>A 0.2 -0.0 --0.2 **-**-0.4 **-**−0.6 **-Patients**

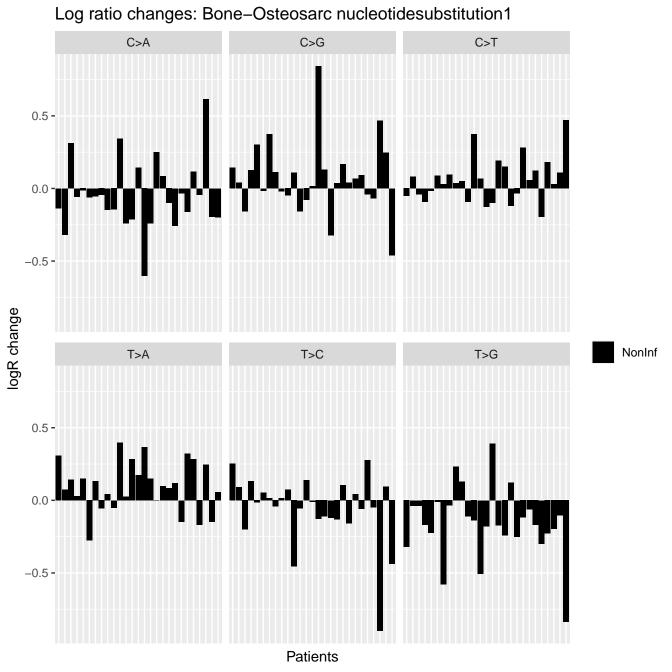
Log ratio changes: Bone-Benign signatures SBS1 SBS2 SBS5 2 -1 -0 --1 logR change Inf SBS8 SBS40 SBS51 NonInf 2 -1 -0 --1 **-**-2 **-**

Patients

Log ratio changes: Bone-Epith nucleotidesubstitution1 C>A C>G C>T 0.50 -0.25 -0.00 --0.25 logR change T>C NonInf T>A T>G 0.50 -0.25 -0.00 --0.25 **-Patients**

Log ratio changes: Bone-Epith signatures SBS1 SBS2 SBS5 1 -SBS6 SBS8 SBS13 1-Inf NonInf





Log ratio changes: Bone-Osteosarc signatures SBS1 SBS2 SBS3 SBS5 3 -2-1 --1 **-**-2 **-**SBS8 SBS12 SBS13 SBS17b 3 -2logR change Inf NonInf -2 **-**SBS30 SBS40 3 -2 -1 -

Patients

Log ratio changes: Breast-AdenoCA nucleotidesubstitution1 C>A C>G C>T 1.0 --0.5 logR change NonInf T>A T>C T>G -0.5 **-**−1.0 **-Patients**

Log ratio changes: Breast-AdenoCA signatures SBS1 SBS2 SBS3 SBS5 2.5 --2.5 **-**-5.0 **-**SBS8 SBS9 SBS12 SBS13 2.5 -0.0 -2.5 logR change -5.0 -Inf SBS17a SBS18 SBS37 SBS17b NonInf 0.0 -2.5SBS41 SBS39 2.5 --2.5 **-**-5.0 **-Patients**

Log ratio changes: Breast-DCIS nucleotidesubstitution1 C>A C>G C>T 0.2 -0.0 -−0.2 og Change Change Og Change NonInf T>C T>G T>A 0.0 --0.2 **-**-0.4 **-Patients**

Log ratio changes: Breast-DCIS signatures SBS1 SBS2 SBS3 SBS4 SBS5 SBS6 SBS7a SBS7b SBS7c 2 **-**0 **-**SBS7d SBS8 SBS9 SBS10a SBS10b SBS11 SBS12 **SBS13** SBS14 2 **-**0 **-SBS15** SBS17a SBS17b SBS21 SBS22 **SBS16 SBS18 SBS19** SBS20 2 **-**0 **-**-2 **-**SBS23 SBS24 SBS25 SBS26 SBS27 SBS28 SBS29 SBS30 **SBS31** 2 **-**0 **-**-2 logR change Inf SBS32 SBS33 SBS34 SBS35 SBS36 SBS37 SBS38 SBS39 SBS40 NonInf 2 **-**0 **-**-2 **-**SBS41 SBS42 SBS43 SBS44 SBS45 SBS47 **SBS46 SBS48 SBS49** 2 **-**0 --2 **SBS50 SBS51** SBS52 **SBS53** SBS54 SBS55 **SBS56** SBS57 **SBS58** 2 **-**0 **-**SBS59 **SBS60** SBS84 SBS85 2**-**0**-Patients**

Log ratio changes: Breast-LobularCA nucleotidesubstitution1 C>A C>G C>T 1.0 -0.5 -0.0 logR change NonInf T>A T>C T>G 0.5 -**Patients**

Log ratio changes: Breast–LobularCA signatures SBS1 SBS2 SBS3 2 --2 **-**Inf SBS5 SBS13 SBS18 NonInf 2 -0 --2 **-**

logR change

Patients

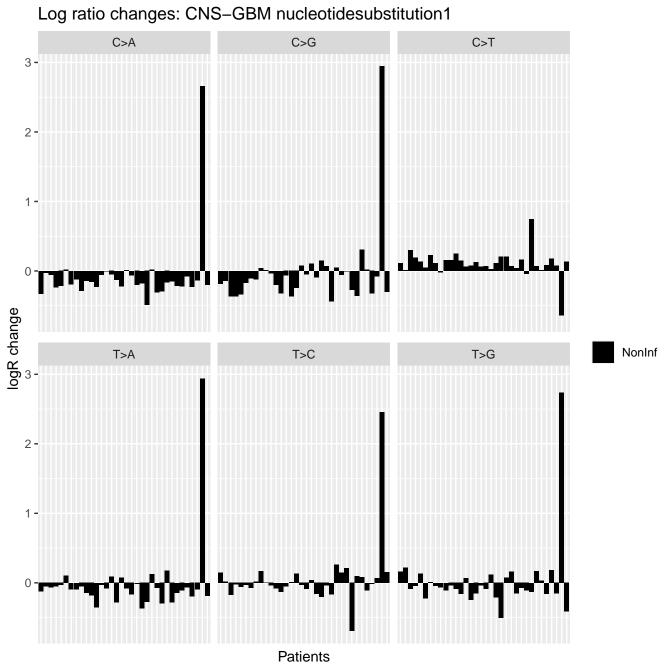
Log ratio changes: Cervix-AdenoCA nucleotidesubstitution1 C>A C>G C>T 0.50 -0.25 -0.00 --0.25 **-**-0.50 logR change NonInf T>C T>A T>G 0.50 -0.25 -0.00 --0.25 **-**-0.50 **-Patients**

Log ratio changes: Cervix–AdenoCA signatures SBS1 SBS2 0.5 -0.0 logR change NonInf SBS5 SBS13 0.5 -0.0 -**Patients**

Log ratio changes: Cervix-SCC nucleotidesubstitution1 C>A C>G C>T 1.0 -0.5 -−0.5 logR change NonInf T>A T>G T>C 1.0 -0.5 -0.0 --0.5 **-Patients**

Log ratio changes: Cervix–SCC signatures SBS1 SBS2 SBS5 4 -3 -2 -1 --1 **-**SBS13 SBS18 SBS33 4 -3 logR change 2 -Inf NonInf -1 **-**SBS40 4 -3 **-**2-1 -

Patients



Log ratio changes: CNS-GBM signatures SBS1 SBS8 SBS5 2 -1 --1 **-**-2 **-**SBS11 SBS15 SBS30 Inf NonInf SBS31 SBS37 SBS40 2 -

logR change

Patients

Log ratio changes: CNS-Medullo nucleotidesubstitution1 C>A C>G C>T 1 -**-1**logR change Inf T>G T>A T>C NonInf 1 --1 **-**

Patients

Log ratio changes: CNS-Medullo signatures SBS1 SBS5 SBS6 2.5 --2.5 **-**-5.0 **-**SBS18 SBS23 SBS8 0. 0. -2.5 -2.5 -Inf NonInf -5.0 **-**SBS40 SBS46 SBS39 2.5 -2.5 **-**

Patients

Log ratio changes: CNS-Oligo nucleotidesubstitution1 C>A C>G C>T 0.6 -0.4 -0.2 -0.0 logR change 0.6 T>A T>G NonInf T>C 0.4 -0.2 --0.2 **-**-0.4 **-Patients**

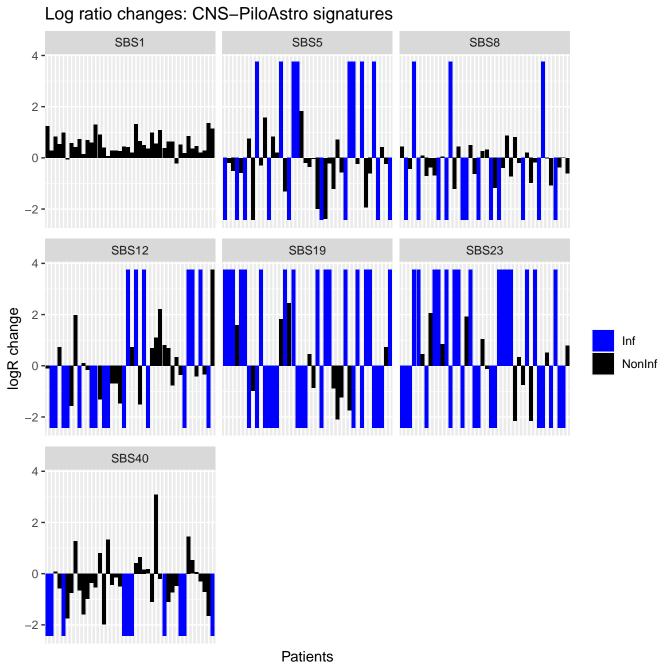
Log ratio changes: CNS-Oligo signatures SBS1 SBS5 SBS8 1 --1 **-**Inf SBS23 SBS40 SBS46 NonInf 1 -

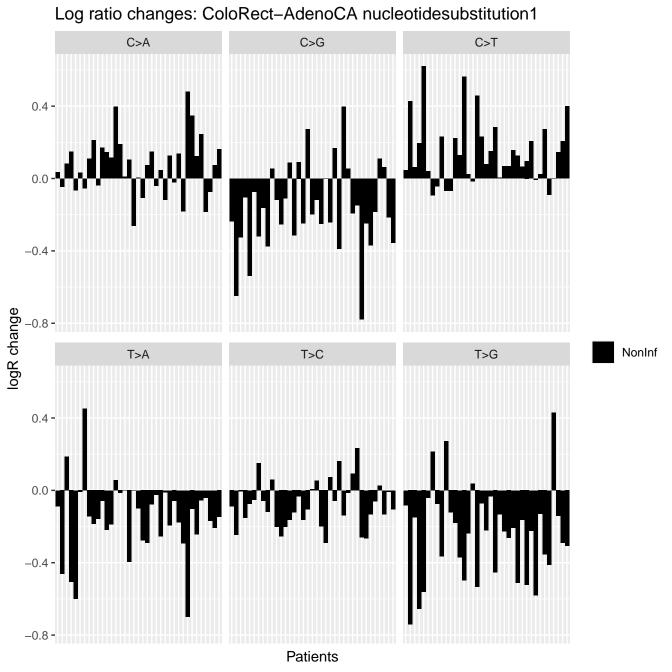
logR change

-2 **-**

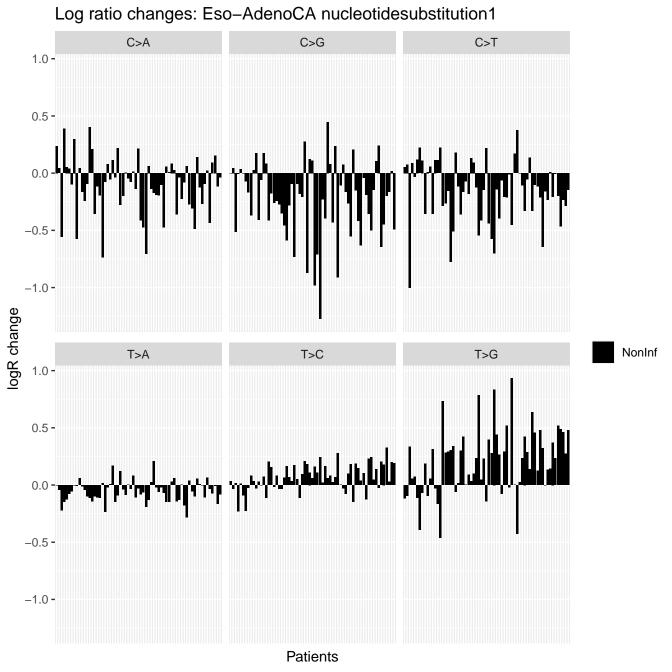
Patients

Log ratio changes: CNS-PiloAstro nucleotidesubstitution1 C>A C>G C>T 2 -1 logR change Inf T>C T>G T>A NonInf 1 -0 -**Patients**





Log ratio changes: ColoRect-AdenoCA signatures SBS1 SBS10a SBS10b 5.0 -2.5 --2.5 SBS14 SBS18 SBS28 5.0 logR change 2.5 Inf 0.0 NonInf -2.5 **-**SBS37 SBS40 SBS44 5.0 -2.5 --2.5 **-Patients**

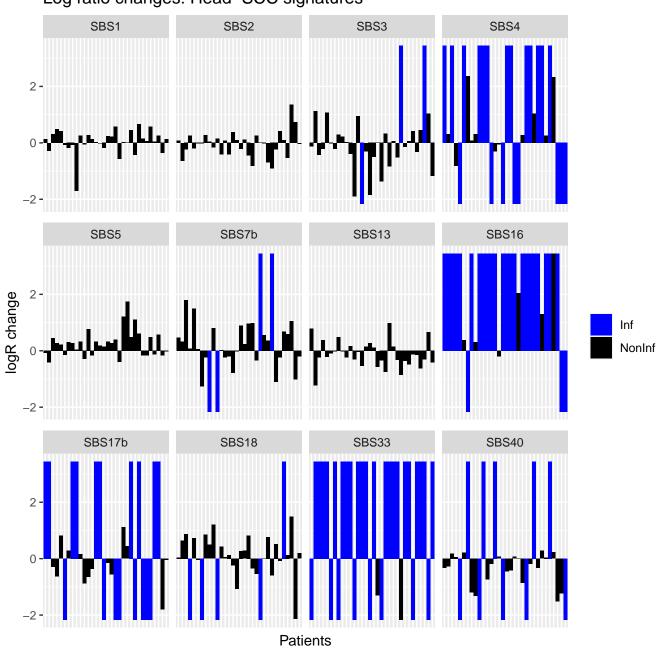


Log ratio changes: Eso-AdenoCA signatures SBS1 SBS2 SBS5 SBS3 4 -2 --2 **-**SBS17a SBS13 SBS17b SBS18 logR change Inf NonInf SBS28 SBS30 SBS40 SBS46 2 -

Patients

Log ratio changes: Head-SCC nucleotidesubstitution1 C>A C>G C>T 0.8 -0.4 -−0.4 logR change NonInf T>A T>C T>G 0.8 -0.4 --0.4 **-Patients**

Log ratio changes: Head-SCC signatures



Log ratio changes: Kidney-ChRCC nucleotidesubstitution1 C>A C>G C>T 0.8 --0.4 logR change NonInf T>A T>G T>C 0.8 -0.4 -−0.4 **-Patients**

Log ratio changes: Kidney-ChRCC signatures SBS1 SBS2 SBS5 2 --2 **-**SBS17a SBS13 SBS17b 2 logR change Inf NonInf SBS29 SBS40 2 -

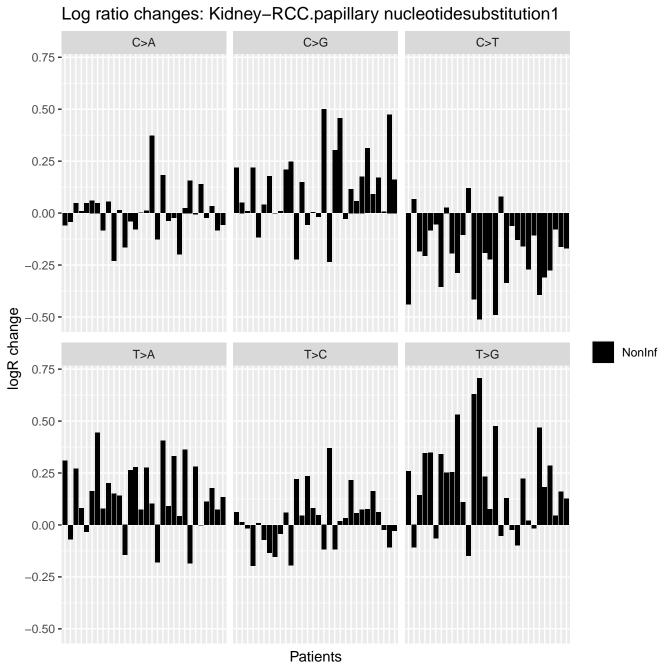
Patients

Log ratio changes: Kidney-RCC.clearcell nucleotidesubstitution1 C>A C>G C>T 1.0 -0.5 logR change NonInf T>A T>C T>G -0.5 **-**

Patients

Log ratio changes: Kidney-RCC.clearcell signatures SBS1 SBS2 SBS5 SBS6 2.5 --5.0 **-**SBS13 SBS22 SBS29 SBS12 2.5 logR change 0.0 -Inf NonInf SBS40 SBS41 2.5 --2.5 **-**−5.0 **-**

Patients

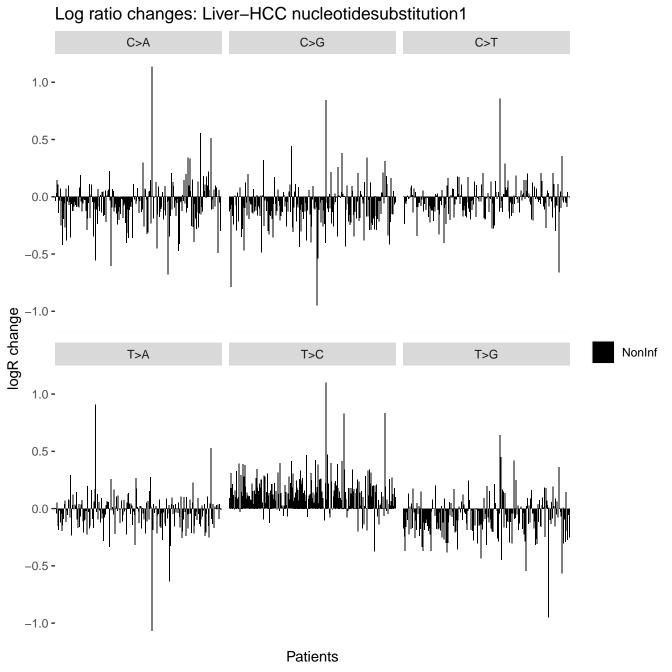


Log ratio changes: Kidney-RCC.papillary signatures SBS1 SBS2 SBS5 SBS6 2 --4 **-**SBS22 SBS12 SBS13 SBS29 Inf NonInf SBS41 SBS40 2 --2 **-**

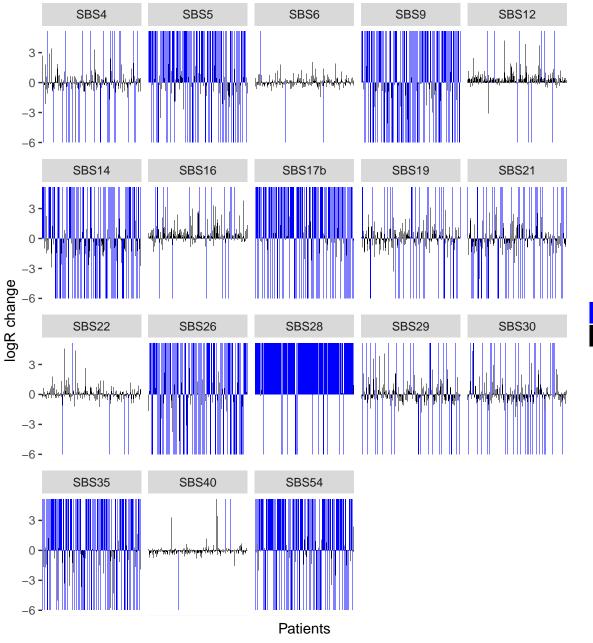
logR change

-4 **-**

Patients



Log ratio changes: Liver–HCC signatures



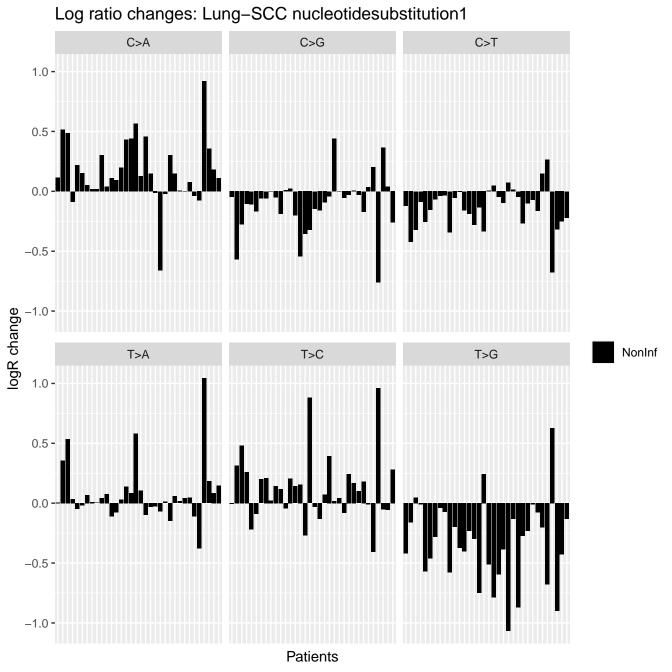
Inf

NonInf

Log ratio changes: Lung-AdenoCA nucleotidesubstitution1 C>A C>G C>T 1 --1 logR change T>C NonInf T>A T>G 1 -_1 **-Patients**

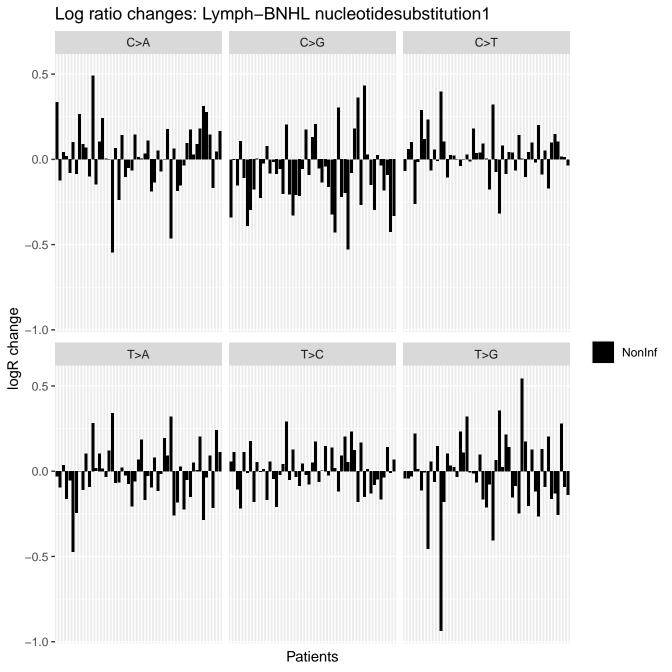
Log ratio changes: Lung-AdenoCA signatures SBS1 SBS2 SBS3 SBS4 2 --2 **-**SBS13 SBS5 SBS9 SBS17a 2 logR change Inf NonInf SBS17b SBS18 SBS40 SBS50 2 --2 **-**

Patients

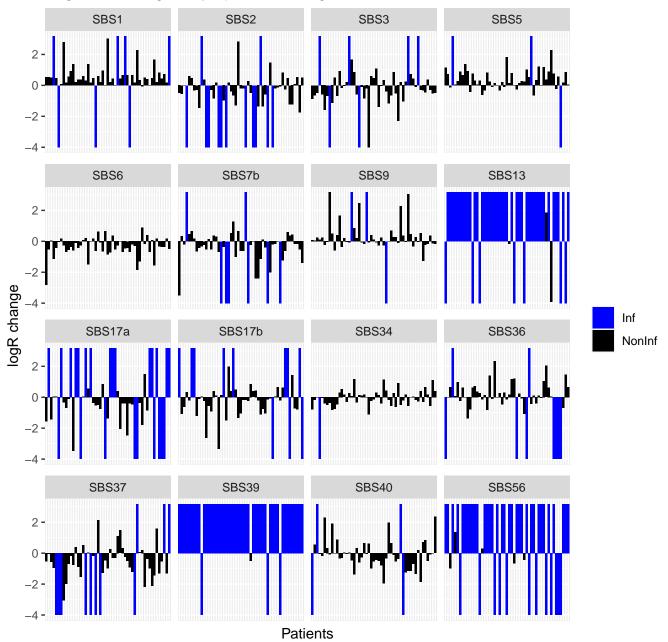


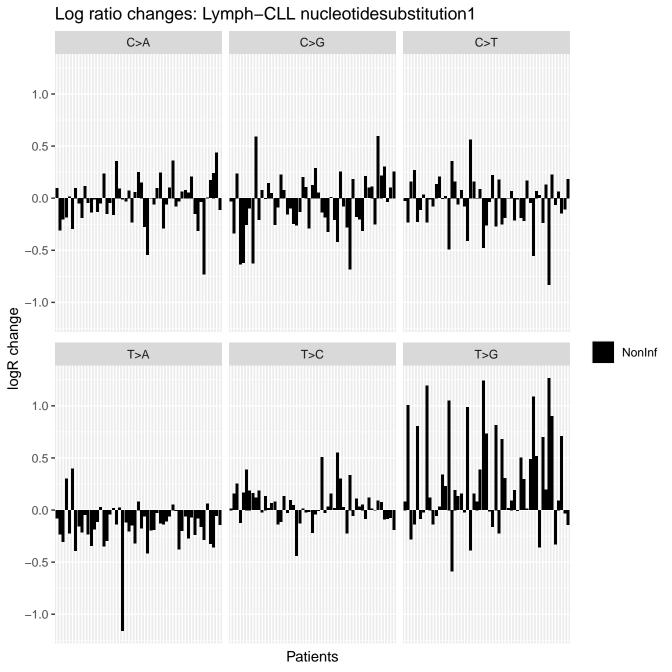
Log ratio changes: Lung-SCC signatures SBS1 SBS2 SBS4 2 -SBS5 SBS8 SBS13 2 odk change Inf NonInf SBS33 2 -

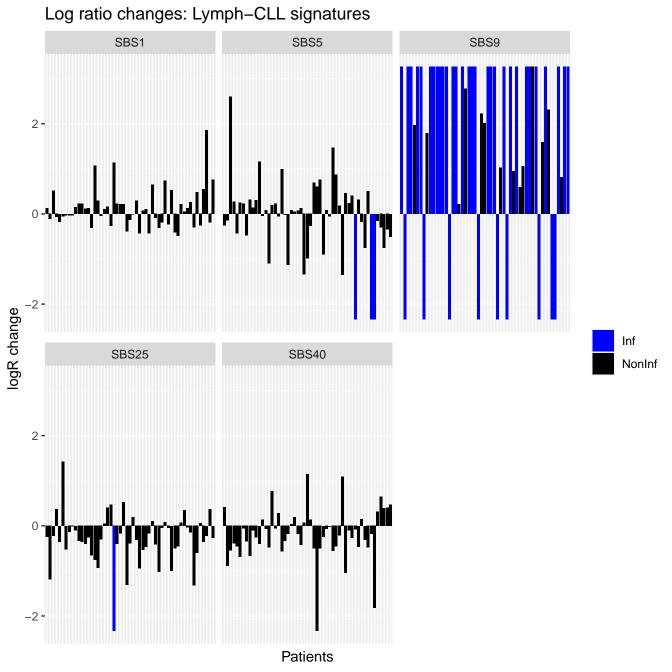
Patients



Log ratio changes: Lymph–BNHL signatures





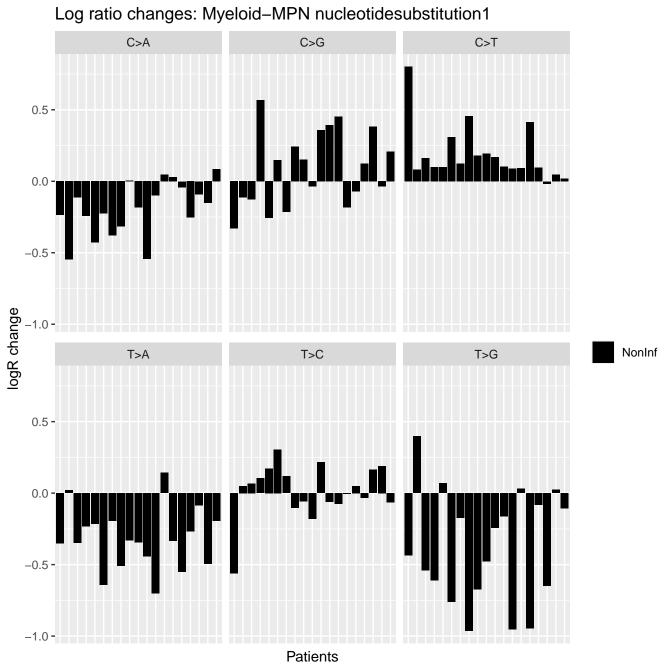


Log ratio changes: Myeloid-AML nucleotidesubstitution1 C>A C>G C>T 1.5 **-**1.0 -0.5 -0.0 --0.5 **-**-1.0 logR change T>G NonInf T>A T>C 1.5 -1.0 -0.5 -0.0 --0.5 **-**-1.0 **-Patients**

Log ratio changes: Myeloid-AML signatures SBS1 SBS5 2 -1 -0 -_1 **-**-2 **-**Inf SBS18 SBS31 NonInf 1 -0 -

logR change

-2 **-**



Log ratio changes: Myeloid–MPN signatures SBS1 SBS5 SBS6 3 -2 -1 logR change Inf SBS8 SBS32 SBS19 NonInf 3 -2 -1 -**Patients**

Log ratio changes: Ovary-AdenoCA nucleotidesubstitution1 C>A C>G C>T 0.6 -0.3 --0.3 logR change - 9.0 -NonInf T>G T>A T>C 0.3 -

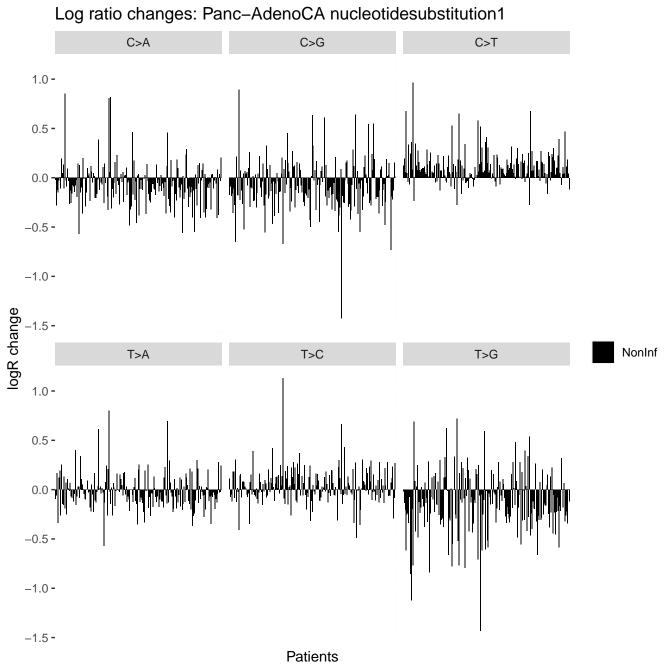
Patients

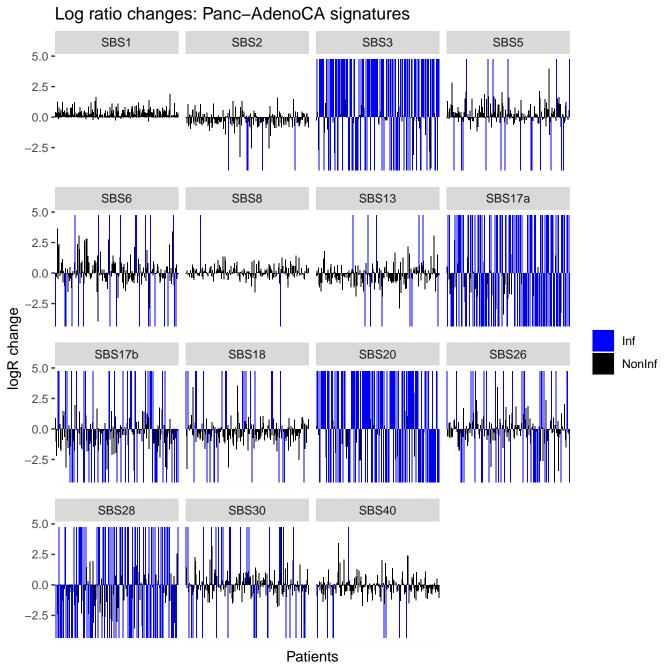
-0.6 **-**

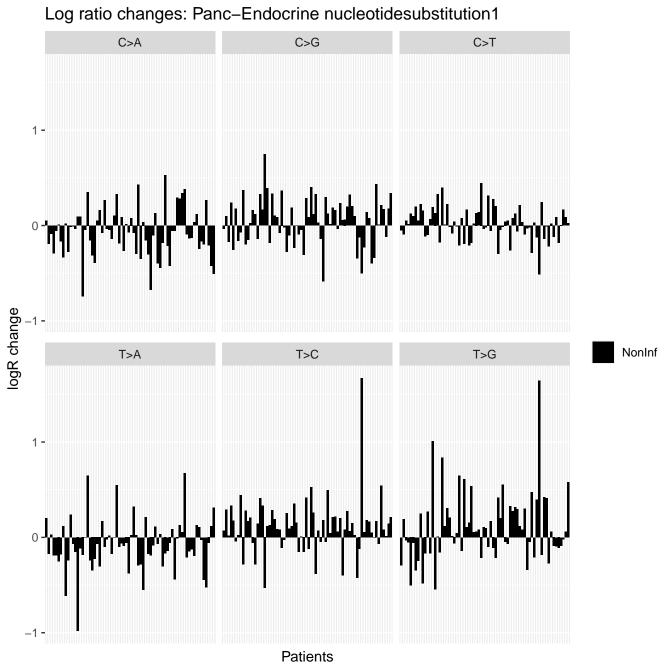
Log ratio changes: Ovary-AdenoCA signatures SBS1 SBS2 SBS3 SBS5 5.0 -2.5 -2.5 **-**−5.0 **-**SBS13 SBS6 SBS8 **SBS18** 5.0 -2.5 -0.0 -2.5 logR change -5.0 Inf SBS40 SBS26 SBS35 SBS39 NonInf 5.0 2.5 0.0 SBS41 5.0 -2.5 -

Patients

-2.5

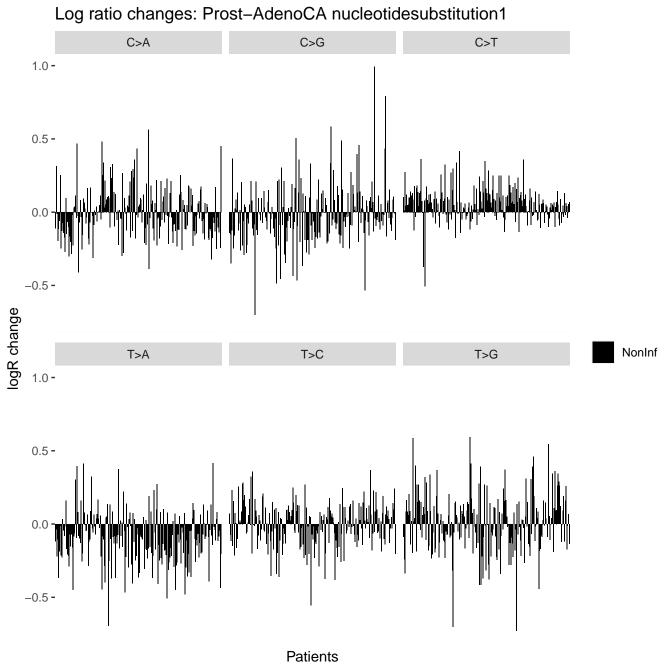


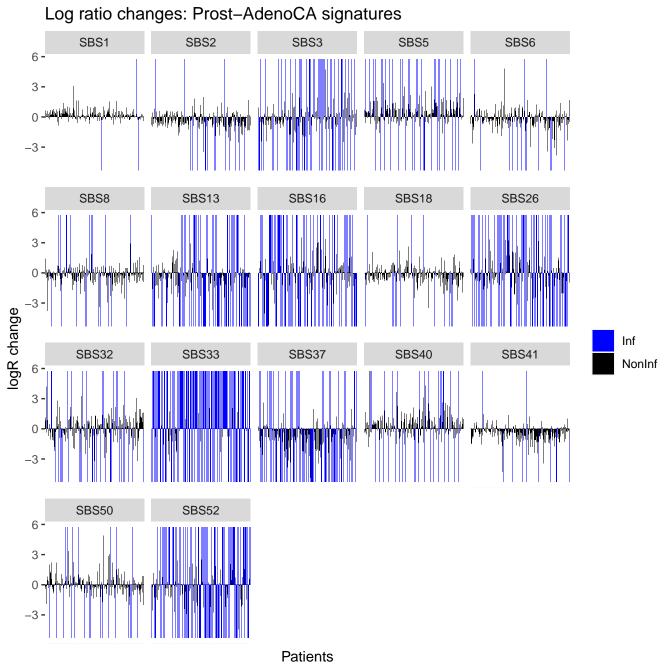




Log ratio changes: Panc-Endocrine signatures SBS1 SBS2 SBS3 SBS5 -2 SBS8 SBS9 SBS11 SBS6 Inf SBS30 SBS12 SBS19 SBS13 NonInf 2 -SBS36 SBS39

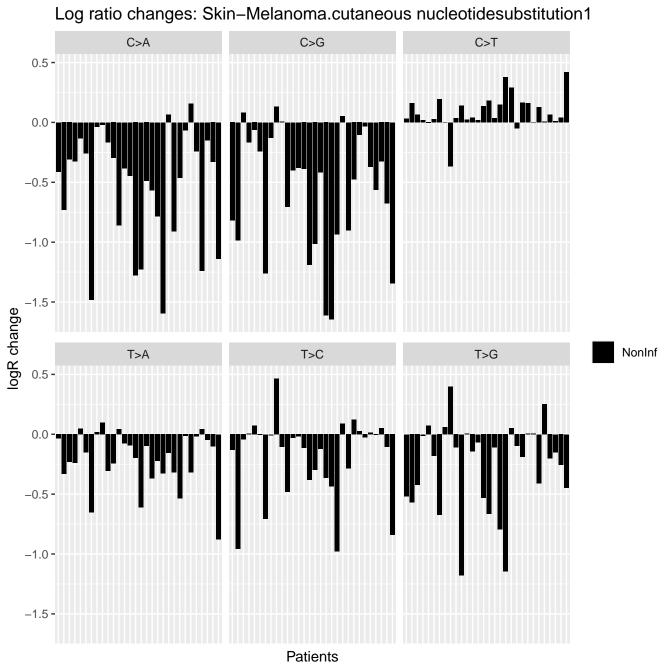
logR change





Log ratio changes: Skin-Melanoma.acral nucleotidesubstitution1 C>A C>G C>T 0.50 -0.25 -0.00 -0.25 logR change NonInf T>C T>A T>G 0.50 -0.25 --0.25 **-Patients**

Log ratio changes: Skin-Melanoma.acral signatures SBS1 SBS2 SBS7a 2 -1 --1 **-**SBS7b SBS7c SBS31 2 logR change Inf NonInf -1 **-**SBS38 SBS40 SBS58 2 -1 --1 **-Patients**

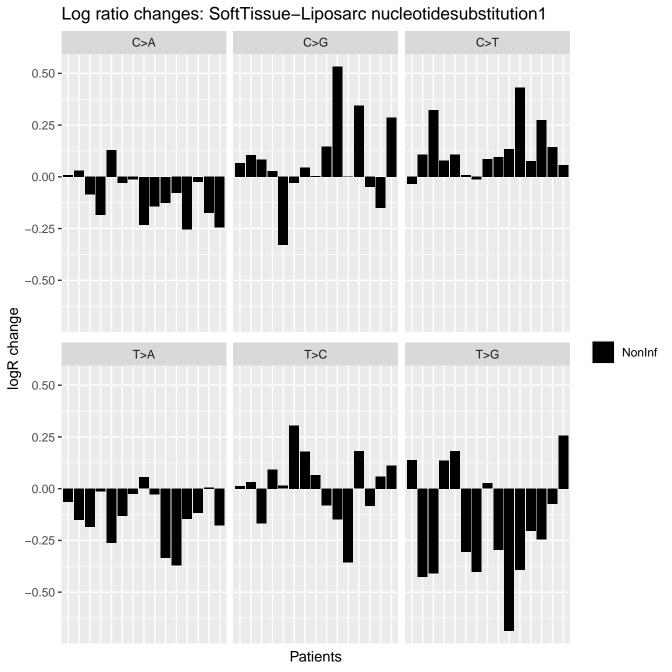


Log ratio changes: Skin-Melanoma.cutaneous signatures SBS1 SBS2 SBS7a 2 -SBS7b SBS7c SBS31 2 logR change Inf NonInf SBS38 SBS40 SBS58 2 -**Patients**

Log ratio changes: SoftTissue-Leiomyo nucleotidesubstitution1 C>A C>G C>T 0.6 -0.3 -−0.3 logR change NonInf T>C T>G 0.3 -**Patients**

Log ratio changes: SoftTissue-Leiomyo signatures SBS1 SBS5 SBS8 -2 **-**-4 **-**SBS13 SBS30 SBS17b logR change Inf NonInf -4 **-**SBS40 -2 **-**

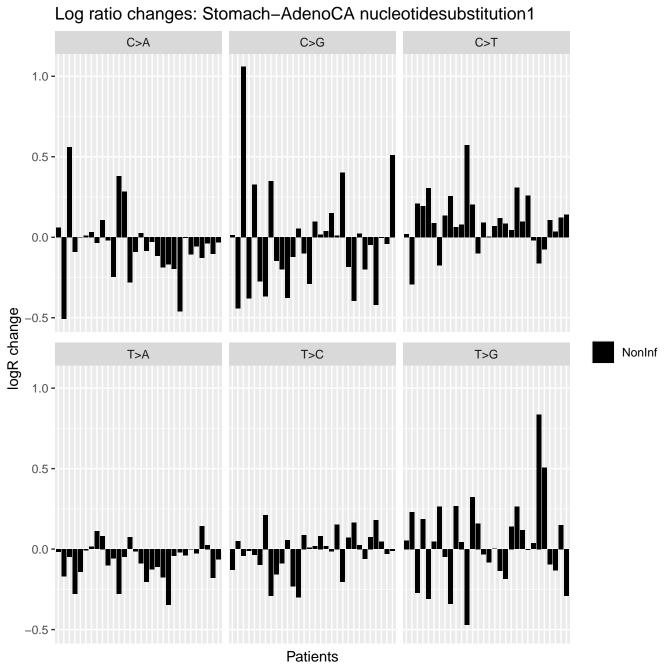
-4 -



Log ratio changes: SoftTissue-Liposarc signatures SBS1 SBS2 SBS3 2 --2 **-**SBS6 SBS8 SBS13 2 -Inf NonInf -2 **-**SBS37 SBS40 2 -

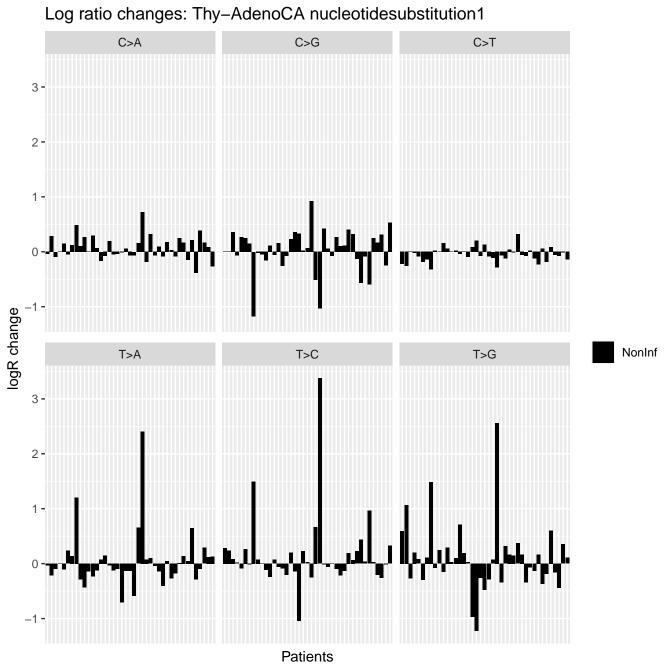
logR change

Patients



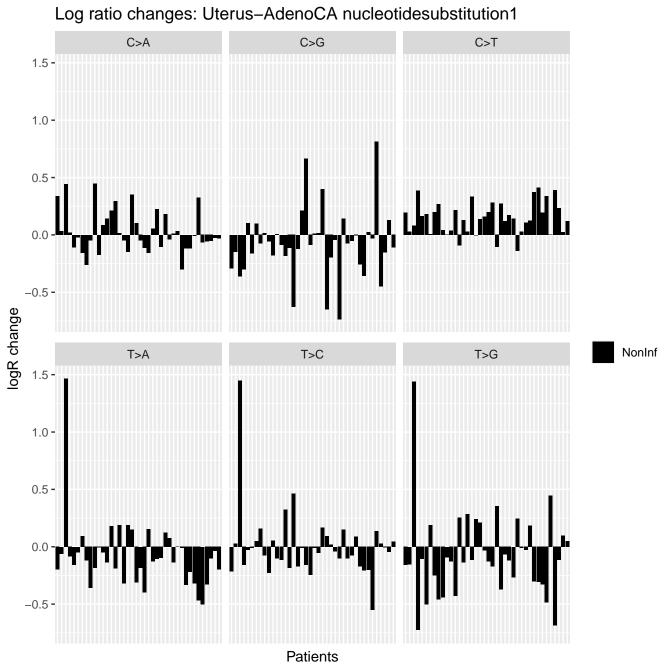
Log ratio changes: Stomach-AdenoCA signatures SBS1 SBS2 SBS7b SBS3 SBS5 4 -2 --2 **-**SBS9 SBS13 SBS15 SBS17a SBS17b logR change Inf SBS18 SBS20 SBS26 SBS40 SBS21 NonInf 2 -0 --2 **-**SBS41 SBS44 4 -2 -

Patients



Log ratio changes: Thy-AdenoCA signatures SBS1 SBS2 SBS5 2 --2 **-**SBS6 SBS8 SBS13 2logR change Inf NonInf SBS40 2--2 **-**

Patients



Log ratio changes: Uterus-AdenoCA signatures SBS1 SBS2 SBS10a SBS6 6 -4 -2 -" ||¶ -2 **-**SBS14 SBS15 SBS26 SBS13 6 logR change Inf NonInf -2 **-**SBS40 SBS44 SBS28 6 -2 --2 **-Patients**