LM Coefficients for: H2O2_100.000_Disulfiram_1.0 ER gasdermin Mito 2 Feature group (if applicable) 0 Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution **Texture** R2 score 0.1 0.2 0.3 -2 4e-04 4e-04 -4e-04 0e+00 -4e-04 0e+00 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_Nigericin_100.000_10.0_DMSO_0.025 ER gasdermin Mito 2 . Feature group (if applicable) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM RadialDistribution other **Texture** R2 score 0.1 0.2 0.3 0 0.4 -2

4e-04

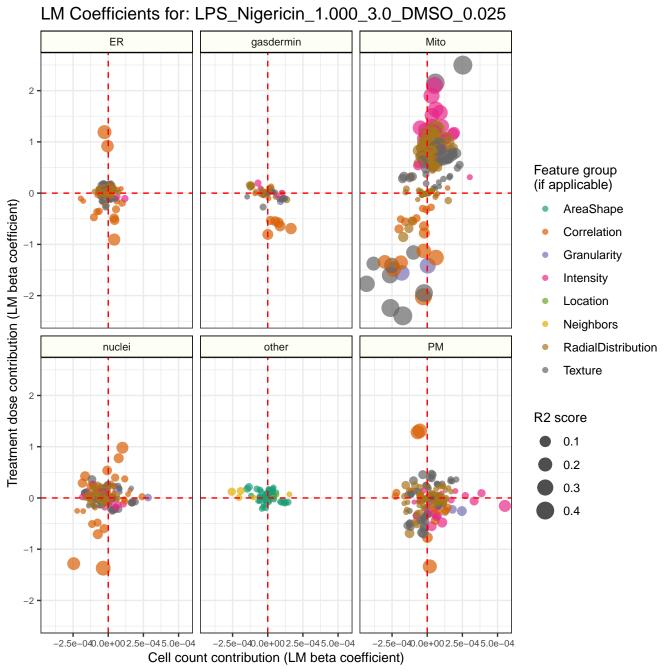
4e-04 -4e-04 0e+00 4e-04 -4e-04 0e+00

Cell count contribution (LM beta coefficient)

Treatment dose contribution (LM beta coefficient)

-4e-04

0e+00



LM Coefficients for: LPS_Nigericin_1.000_10.0_Disulfiram_1.0 ER gasdermin Mito 2 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution **Texture** R2 score 0.1 0.2 0.3 0 0.4 -1-2 -3e-04 0e+00 6e-04 -3e-04 0e+00 3e-04 -3e-04 0e+00 3e-04 6e-04 Cell count contribution (LM beta coefficient)

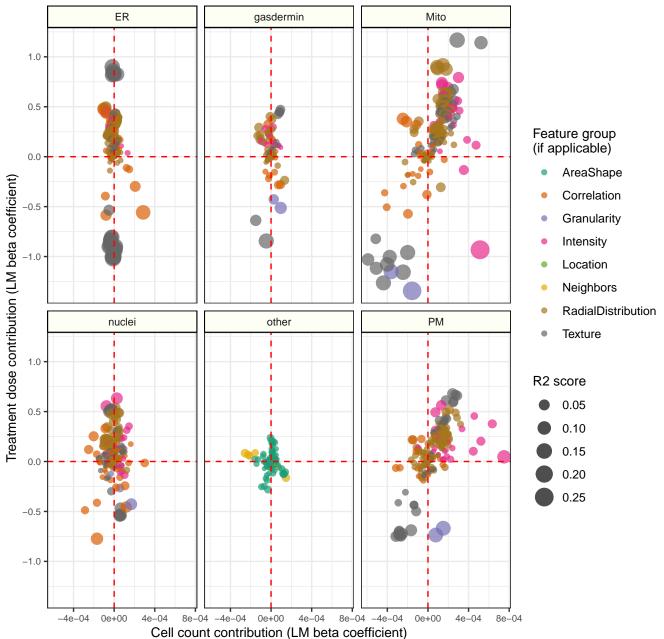
LM Coefficients for: LPS_Nigericin_1.000_10.0_DMSO_0.025 ER gasdermin Mito 2 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors PM nuclei other RadialDistribution **Texture** R2 score 0.1 0.2 0.3 0.4 -2 **-**-2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_100.000_DMSO_0.025 ER gasdermin Mito Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution Texture R2 score 0.1 0.2 0.3 -1 -2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_Nigericin_100.000_3.0_DMSO_0.025 ER gasdermin Mito Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors PM nuclei other RadialDistribution Texture R2 score 0.1 0.2 0.3 -2e-04 0e+00 2e-04 4e-04 -2e-04 0e+00 2e-04 4e-04 -2e-04 0e+00 2e-04 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: Thapsigargin_10.000_DMSO_0.025 ER gasdermin Mito 1.0 0.5 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei other PM RadialDistribution 1.0 **Texture** R2 score 0.5 0.05 0.10 0.0 0.15 0.20 -0.5 -1.0 4e-04 4e-04 -4e-04 0e+00 -4e-04 0e+00 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_Nigericin_1.000_10.0_Z-VAD-FMK_100.0



LM Coefficients for: LPS_Nigericin_100.000_1.0_DMSO_0.025 ER gasdermin Mito 1.0 0.5 Feature group (if applicable) 0.0 Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei other PM RadialDistribution **Texture** R2 score 0.05 0.5 0.10 0.15 0.0 0.20 -0.5 -1.0

Cell count contribution (LM beta coefficient)

3e-04

6e-04

-3e-04 0e+00

3e-04

-3e-04 0e+00

-3e-04 0e+00

3e-04

6e-04

LM Coefficients for: Flagellin_1.000_Disulfiram_1.0 ER gasdermin Mito 0.5 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution Texture 0.5 R2 score 0.1 0.0 0.2 0.3 -0.5 -1.0 0e+00 5e-04 -5e-04 0e+00 5e-04 -5e-04 -5e-04 0e+00 5e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_10.000_Disulfiram_0.1 ER gasdermin Mito 1.0 0.5 Feature group (if applicable) 0.0 AreaShape Correlation -0.5 Granularity Intensity Location 1.0 Neighbors RadialDistribution nuclei other PM Texture 1.0 R2 score 0.5 0.025 0.050 0.075 0.0 0.100 0.125 -0.5-1.0-5.0e - 92.5e - 040e + 02.5e - 05.0e - 07.5e - 05.0e - 07.5e - 040e + 02.5e - 05.0e - 07.5e - 07.5

Treatment dose contribution (LM beta coefficient)

Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_10.000_Disulfiram_2.5 ER gasdermin Mito 0.5 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei other PM RadialDistribution **Texture** R2 score 0.5 0.05 0.10 0.0 0.15 0.20 -0.5 -1.0 $-6e-04-3e-04 \ 0e+00 \ 3e-04 \ 6e-046e-04-3e-04 \ 0e+00 \ 3e-04 \ 6e-04-3e-04 \ 0e+00 \ 3e-04 \ 6e-046e-04-3e-04 \ 0e+00 \ 3e-04 \ 6e-046e-04-04 \ 0e+00 \ 3e-04 \ 0e+00 \$ Cell count contribution (LM beta coefficient)

LM Coefficients for: Disulfiram_1.000_DMSO_0.025 ER gasdermin Mito 0.5 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution Texture 0.5 R2 score 0.05 0.10 0.15 -0.5 -1.04e-04 -4e-04 0e+00 4e-04 -4e-04 0e+00 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_10.000_Disulfiram_1.0 ER gasdermin Mito 0.5 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape -0.5 Correlation Granularity Intensity Location nuclei PM other Neighbors RadialDistribution **Texture** 0.5 R2 score 0.05 0.0 0.10 -0.5 -1.0 8e-04 0e+00 4e-04 -4e-04 0e+00 4e-04 -4e-04 0e+00 4e-04 8e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_Nigericin_1.000_1.0_DMSO_0.025 ER gasdermin Mito 1.0 0.5 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation -0.5 Granularity Intensity Location Neighbors nuclei other PM RadialDistribution Texture 0.5 R2 score 0.05 0.10 0.0 0.15 -0.5 -1.0-5.0e - 02.5e - 040e + 02.5e - 08.0e - 07.5e + 02.5e + 02.5eCell count contribution (LM beta coefficient)

LM Coefficients for: H2O2_100.000_Z-VAD-FMK_100.0 ER gasdermin Mito 1.0 0.5 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity -0.5 Location Neighbors nuclei PM other RadialDistribution **Texture** R2 score 0.05 0.5 0.10 0.15 0.20 0.0 -0.54e-04 0e+00 -4e-04 0e+00 4e-04 -4e-04 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: Disulfiram_2.500_DMSO_0.025 ER gasdermin Mito 0.5 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape -0.5 Correlation Granularity Intensity Location Neighbors PM nuclei other RadialDistribution 0.5 Texture R2 score 0.025 0.050 0.075 -0.5-5.0e - 021.5e - 040e + 021.5e - 031.0e - 071.5e - 040e + 021.5e - 040e + 021.5e - 041.0e - 071.5e - 041.0e + 021.5e - 041.0e + 021.0e + 021.0e + 021.0e + 021.0e + 021.0e +Cell count contribution (LM beta coefficient)

LM Coefficients for: Thapsigargin_1.000_DMSO_0.025 ER gasdermin Mito 0.4 Feature group (if applicable) 0.0 Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei other PM RadialDistribution **Texture** R2 score 0.025 0.050 0.075 0.100 -0.4-5.0e - 02.5e - 03.0e - 07.5e - 07.5Cell count contribution (LM beta coefficient)

LM Coefficients for: Disulfiram_0.100_DMSO_0.025 ER gasdermin Mito 0.50 0.25 -0.00 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) 0.25 AreaShape Correlation Granularity -0.50 Intensity Location Neighbors nuclei РМ other RadialDistribution 0.50 Texture 0.25 -R2 score 0.02 0.04 0.06 -0.25-0.50-4e-04-2e-040e+00 2e-04 4e-04 -4e-04-2e-040e+00 2e-04 4e-04 -4e-04-2e-040e+00 2e-04 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: Flagellin_0.100_DMSO_0.025 ER gasdermin Mito 0.4 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei PM other RadialDistribution Texture 0.4 R2 score 0.02 0.04 0.0 0.06 -0.4 $-5.0e - 92.5e - 0340e + 02.5e - 05.0e - 04 \\ -5.0e - 92.5e - 0340e + 02.5e - 05.0e - 04 \\ -5.0e - 92.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 04 \\ -5.0e - 02.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 04 \\ -5.0e - 02.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 04 \\ -5.0e - 03.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 04 \\ -5.0e - 03.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 03.5e - 0340e + 02.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 03.5e - 0340e + 02.5e - 0340e + 02.5e - 0340e + 02.5e \\ -05.0e - 03.5e - 0340e + 02.5e - 0340e +$ Cell count contribution (LM beta coefficient)

LM Coefficients for: Flagellin_1.000_DMSO_0.025 ER gasdermin Mito 0.3 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation -0.3 Granularity Intensity Location Neighbors nuclei other PM RadialDistribution Texture 0.3 R2 score 0.01 0.02 0.03 -0.3 -0.6-2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 -2.5e-040.0e+002.5e-045.0e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: media ctr_0_Media ctr_0.0 ER gasdermin Mito 0.2 0.0 Feature group (if applicable) AreaShape Treatment dose contribution (LM beta coefficient) -0.2 Correlation Granularity Intensity Location Neighbors RadialDistribution nuclei other PM Texture 0.2 R2 score 0.01 0.02 0.03 0.04 -0.20.05 -0.42e-04 -2e-04 0e+00 2e-04 -2e-04 0e+00 -2e-04 0e+00 2e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: DMSO_0.100_Z-VAD-FMK_100.0 ER gasdermin Mito 0.50 0.25 Feature group (if applicable) 0.00 Treatment dose contribution (LM beta coefficient) AreaShape Correlation -0.25 **-**Granularity Intensity Location 0.50 Neighbors nuclei other РМ RadialDistribution 0.50 **Texture** R2 score 0.25 0.02 0.04 0.06 0.00 0.08 -0.25 -0.50 **-**5e-04 0e+00 5e-04 0e+00 0e+00 5e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_10.000_Z-VAD-FMK_100.0 ER gasdermin Mito 0.25 Feature group (if applicable) 0.00 AreaShape Treatment dose contribution (LM beta coefficient) Correlation Granularity -0.25 **-**Intensity Location Neighbors -0.50 RadialDistribution РМ nuclei other Texture R2 score 0.25 0.01 0.02 0.03 0.04 0.05 -0.25-0.504e-04 -4e-04 0e+00 4e-04 -4e-04 0e+00 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: DMSO_0.100_DMSO_1.0 ER gasdermin Mito 0.4 0.2 Feature group (if applicable) AreaShape Treatment dose contribution (LM beta coefficient) Correlation Granularity Intensity Location Neighbors RadialDistribution PM nuclei other Texture R2 score 0.01 0.2 0.02 0.03 0.04 0.0 0.05 -0.2-4e-04-2e-040e+00 2e-04 4e-04 6e-404-04-2e-040e+00 2e-04 4e-04 6e-404-04-2e-040e+00 2e-04 4e-04 6e-04 Cell count contribution (LM beta coefficient)

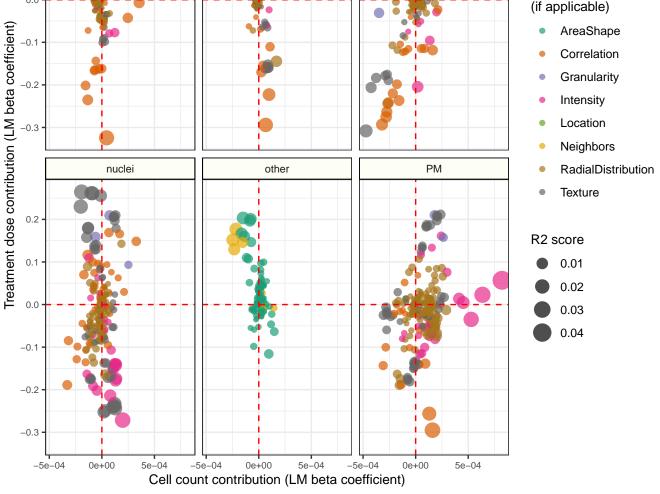
LM Coefficients for: LPS_10.000_DMSO_0.025 ER gasdermin Mito 0.4 0.2 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation -0.2 Granularity Intensity Location Neighbors nuclei PM other RadialDistribution **Texture** R2 score 0.2 0.01 0.02 0.03 0.04 -0.2-0.4-5.0e - 02.5e - 0340e + 02.5

Cell count contribution (LM beta coefficient)

LM Coefficients for: Topotecan_5.000_DMSO_0.025 ER gasdermin Mito 0.4 0.2 Feature group (if applicable) 0.0 Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity Location Neighbors nuclei other PM RadialDistribution **Texture** R2 score 0.2 0.01 0.02 0.03 0.0 0.04 -0.2-0.4-5.0e - 024.5e - 040e + 022.5e - 034.0e - 074.5e - 034.0e - 074.5e - 040e + 022.5e - 040e +

Cell count contribution (LM beta coefficient)

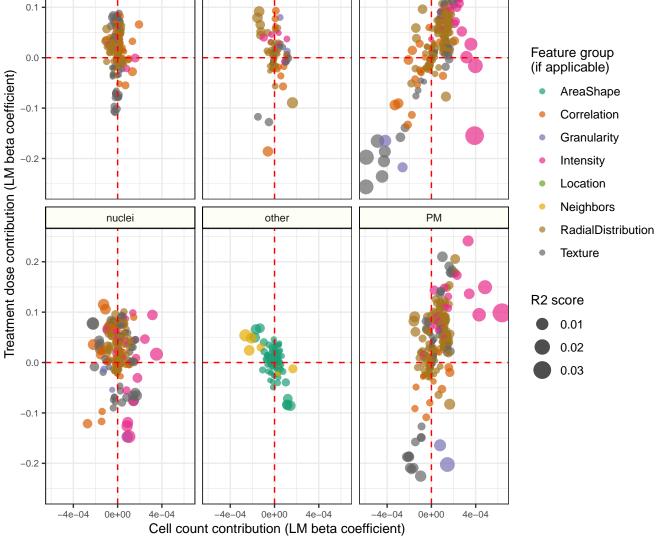
LM Coefficients for: LPS_1.000_DMSO_0.025 ER gasdermin Mito 0.2 0.1 Feature group 0.0 (if applicable) AreaShape -0.1 Correlation Granularity -0.2 Intensity Location -0.3 Neighbors other PMRadialDistribution nuclei **Texture** 0.2 R2 score 0.1 0.01 0.02 0.0



LM Coefficients for: Topotecan_20.000_DMSO_0.025 ER gasdermin Mito 0.3 0.2 0.1 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape -0.1 Correlation Granularity -0.2 Intensity Location -0.3 Neighbors other PM nuclei 0.3 RadialDistribution Texture 0.2 R2 score 0.1 0.01 0.02 0.0 0.03 -0.1-0.2-0.3 -5.0e - 92.5e - 0340e + 02.5e - 0350e - 04 - 5.0e - 92.5e - 0340e + 02.5e - 0350e - 04 - 5.0e - 92.5e - 0340e + 02.5e - 0350e - 04 - 02.5e - 0350e -Cell count contribution (LM beta coefficient)

LM Coefficients for: H2O2_100.000_DMSO_0.025 ER gasdermin Mito 0.2 0.1 0.0 Feature group (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity -0.2 Intensity Location nuclei PM other Neighbors RadialDistribution 0.2 **Texture** R2 score 0.1 0.05 0.10 -0.1 -0.2 -0.3-4e-04 0e+00 4e-04 -4e-04 0e+00 4e-04 -4e-04 0e+00 4e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_0.010_DMSO_0.025 ER gasdermin Mito 0.2 0.1 Feature group (if applicable) 0.0 AreaShape -0.1 Correlation Granularity -0.2 Intensity Location Neighbors nuclei other PM RadialDistribution **Texture** 0.2 R2 score



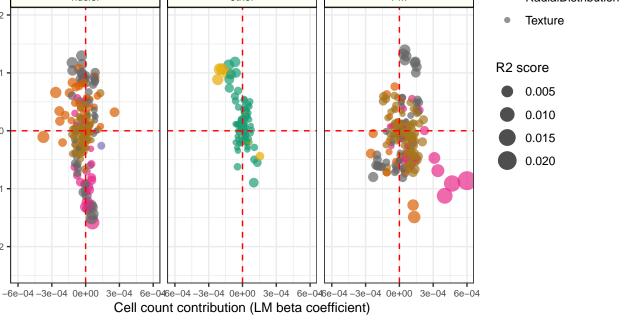
LM Coefficients for: DMSO_0.100_Z-VAD-FMK_30.0 ER gasdermin Mito 0.2 0.1 Feature group (if applicable) 0.0 AreaShape Treatment dose contribution (LM beta coefficient) Correlation Granularity Intensity -0.2 Location Neighbors RadialDistribution PM nuclei other Texture 0.2 R2 score 0.01 0.1 0.02 0.03 0.04 0.05 -0.1 -0.20e+00 5e-04 -5e-04 -5e-04 0e+00 5e-04 -5e-04 0e+00 5e-04 Cell count contribution (LM beta coefficient)

LM Coefficients for: LPS_0.100_DMSO_0.025 ER gasdermin Mito 0.2 0.1 Feature group 0.0 (if applicable) AreaShape Correlation -0.1 Granularity Intensity Location Neighbors nuclei PM other RadialDistribution 0.2 **Texture** R2 score 0.1 0.005

Treatment dose contribution (LM beta coefficient)

-0.1

-0.2



LM Coefficients for: Topotecan_10.000_DMSO_0.025 ER gasdermin Mito 0.2 0.1 Feature group 0.0 (if applicable) Treatment dose contribution (LM beta coefficient) AreaShape Correlation Granularity Intensity -0.2 Location Neighbors nuclei other PM RadialDistribution 0.2 Texture R2 score 0.1 0.005 0.010 0.0 0.015 -0.1-0.2 -2e-04 0e+00 2e-04 4e-04 -2e-04 0e+00 2e-04 4e-04 -2e-04 0e+00 2e-04 4e-04 Cell count contribution (LM beta coefficient)