

Supplementary Materials: LTD₄ and TGF- β ₁ Induce the Expression of Metalloproteinase-1 in Chronic Rhinosinusitis via a Cysteinyl Leukotriene Receptor 1-Related Mechanism

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Table S1. Tukey's multiple comparisons test for CysLT1 receptor expression.

Symbol	Comparisons	Adjusted <i>p</i> value
*	Opti-MEM <i>vs.</i> TGF- β ₁ (10 ng/mL)	0.0062
	Opti-MEM <i>vs.</i> LTD ₄ (10 ⁻⁸ M)	0.0356
	Opti-MEM <i>vs.</i> TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M)	0.0382
\$	TGF- β ₁ (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0217
	TGF- β ₁ (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0495
	TGF- β ₁ (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0156
	TGF- β ₁ (10 ng/mL) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0372
	TGF- β ₁ (10 ng/mL) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁸ M)	0.0249
	TGF- β ₁ (10 ng/mL) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0217
	TGF- β ₁ (10 ng/mL) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0467
§	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M)	0.0141
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M)	0.0176
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M)	0.0229
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0364
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0118
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0207
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0395
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0131
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁸ M)	0.0148
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0011
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast 10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0126
#	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M)	0.0272
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M)	0.0308
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0335
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0466
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0321
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0416
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0163
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁸ M)	0.0103
	TGF- β ₁ (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻¹⁰ M)	0.0145
	TGF- β ₁ + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0367
	TGF- β ₁ + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0257
	TGF- β ₁ + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β ₁ (10 ng/mL) + Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0365

*: *p* value < 0.05 when compared to tissue culture medium (Opti-MEM), §: *p* value < 0.05 when compared to LTD₄ (10⁻⁸ M), \$: *p* value < 0.05 when compared to TGF- β ₁, #: *p* value < 0.05 when compared to TGF- β ₁ + LTD₄.

Table S2. Tukey's multiple comparisons test for MMP1 protein concentrations.

Symbol	Comparisons	Adjusted <i>p</i> Value
*	Opti-MEM <i>vs.</i> TGF- β_1 (10 ng/mL)	0.0315
	Opti-MEM <i>vs.</i> LTD ₄ (10 ⁻⁸ M)	0.0133
	Opti-MEM <i>vs.</i> TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M)	0.0003
\$	TGF- β_1 (10 ng/mL) <i>vs.</i> LTD ₄ (10 ⁻⁸ M)	0.0236
	TGF- β_1 (10 ng/mL) <i>vs.</i> TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M)	0.0139
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁶ M)	0.0234
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁸ M)	0.0301
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0167
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0361
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0311
	TGF- β_1 (10 ng/mL) <i>vs.</i> Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0167
	TGF- β_1 (10 ng/mL) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0144
	TGF- β_1 (10 ng/mL) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0216
§	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M)	0.0015
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M)	0.0451
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M)	0.0257
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0298
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0451
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0257
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0298
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0158
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁸ M)	0.0318
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0353
	LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0433
#	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M)	0.0027
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M)	0.0007
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M)	0.0019
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0027
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0007
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0019
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M)	0.0027
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁸ M)	0.0306
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻¹⁰ M)	0.0474
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁶ M) + LTD ₄ (10 ⁻⁸ M)	0.0006
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻⁸ M) + LTD ₄ (10 ⁻⁸ M)	0.0014
	TGF- β_1 (10 ng/mL) + LTD ₄ (10 ⁻⁸ M) <i>vs.</i> TGF- β_1 (10 ng/mL) + Montelukast (10 ⁻¹⁰ M) + LTD ₄ (10 ⁻⁸ M)	0.0125

*: *p* value < 0.05 when compared to tissue culture medium (Opti-MEM), §: *p* value < 0.05 when compared to LTD₄ (10⁻⁸ M), \$: *p* value < 0.05 when compared to TGF- β_1 , #: *p* value < 0.05 when compared to TGF- β_1 + LTD₄.