

Supplementary material

Table S1:

Unpaired *t*-test: two-tailed

	Patients MM	Patients MM + GR	Controls + GR
440 nm	0.0844	<0.0001	0.7309
460 nm	0.0054	<0.0001	0.3493
565 nm	0.8074	<0.0001	0.0044
620 nm	0.9395	0.8407	0.7596

F-Test to compare variances

	Patients MM	Patients MM + GR	Controls + GR
440 nm	0.0059	0.6287	0.5712
460 nm	0.2244	0.2577	0.7685
565 nm	0.0661	0.7364	0.3048
620 nm	0.0357	0.0386	0.8460

Multiple *t*-test: two-stage linear step-up procedure of Benjamini, Krieger and Yekutieli

	SSM	NM	ALM	LM	MMIS	undefined
440 nm	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001
460 nm	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001
525 nm	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001	<0.000001
565 nm	0.007494	<0.000001	0.014537	<0.000001	<0.000001	0.000002
620 nm	0.049882	0.115672	0.001639	<0.000001	<0.000001	0.852420

Multiple *t*-test: two-stage linear step-up procedure of Benjamini, Krieger and Yekutieli

	pT1ab	pT2ab	pT3ab	pT4ab	undefined
440 nm	<0.000001	<0.000001	<0.000001	0.000004	<0.000001
460 nm	<0.000001	<0.000001	<0.000001	0.000053	<0.000001
525 nm	<0.000001	<0.000001	<0.000001	0.000034	<0.000001
565 nm	<0.000001	<0.000001	<0.000001	0.000010	<0.000001
620 nm	0.088284	0.002219	<0.000001	0.184843	0.099672

Multiple *t*-test: two-stage linear step-up procedure of Benjamini, Krieger and Yekutieli

Table S2:

Two-way ANOVA Dunnett's multiple comparisons test

	SSM	NM	LM	ALM	MMIS	Undefined
440 nm	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
460 nm	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
525 nm	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
565 nm	0.4978	0.1574	0.0075	0.6921	0.6694	0.0125
620 nm	0.9949	0.9997	0.9092	0.8792	0.0659	>0.9999

	pT1ab	pT2ab	pT3ab	pT4ab	undefined
440 nm	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
460 nm	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
525 nm	<0.0001	<0.0001	<0.0001	0.0134	<0.0001
565 nm	0.1180	0.5835	0.6264	0.8641	0.4724
620 nm	0.9999	0.9913	0.9986	0.9999	0.9997

	Presented melan A	Non-presented melan A	Undefined
440 nm	<0.0001	<0.0001	<0.0001
460 nm	<0.0001	<0.0001	<0.0001
525 nm	0.0076	0.0294	0.0080
565 nm	0.7585	0.7735	0.8264
620 nm	>0.9999	>0.9999	>0.9999

p-Values of emission maxima compared to controls with GR.

Table S3:

Two-way ANOVA Dunnett's multiple comparisons test (compared to SSM)

	NM	LM	ALM	MMIS	Undefined
440 nm	0.0002	0.0001	0.1042	0.5923	0.0010
460 nm	0.0023	0.0022	0.7707	0.6572	0.0071
525 nm	0.9341	0.9920	0.9997	0.9901	0.6814
565 nm	0.9997	0.9976	>0.9999	0.9791	0.9797
620 nm	0.9997	0.9996	0.9999	0.,9949	0.9997

Two-way ANOVA Dunnett's multiple comparisons test (compared to NM)

	SSM	LM	ALM	MMIS	Undefined
440 nm	0.0002	0.5054	<0.0001	0,0005	<0.0001
460 nm	0.0023	0.5945	0.0072	0,0043	<0.0001
525 nm	0.9218	>0.9999	0.9531	0,8109	0.2244
565 nm	0.9997	0.9996	0.9997	0,9423	0.9983
620 nm	0.9997	0.9998	0.9997	0,9794	>0.9999

Two-way ANOVA Dunnett's multiple comparisons test (compared to LM)

	SSM	NM	ALM	MMIS	Undefined
440 nm	0.0001	0.3904	<0.0001	<0.0001	<0.0001
460 nm	0.0018	0.4470	0.0014	0.0009	<0.0001
525 nm	0.9663	>0.9999	0.9452	0.8146	0.5050
565 nm	0.9888	0.9983	0.9938	0.8282	>0.9999
620 nm	0.9977	0.9997	0.9969	0.9411	0.9997

Two-way ANOVA Dunnett's multiple comparisons test (compared to ALM)

	SSM	NM	LM	MMIS	Undefined
440 nm	0.0735	<0.0001	<0.0001	0.9167	>0.9999
460 nm	0.6011	0.0057	0.0014	0.9998	0.8749
525 nm	0.9996	0.8849	0.9452	0.9996	0.9767
565 nm	0.9999	0.9996	0.9938	0.9857	0.9869
620 nm	0.9998	0.9995	0.9969	0.9980	0.9996

Two-way ANOVA Dunnett's multiple comparisons test (compared to MMIS)

	SSM	NM	LM	ALM	undefined
440 nm	0.4312	0.0005	<0.0001	0.9167	0.8249
460 nm	0.4866	0.0034	0.0009	0.9998	0.9468
525 nm	0.9600	0.6761	0.8146	0.9996	0.9997
565 nm	0.9281	0.8575	0.8282	0.9857	0.6982
620 nm	0.9784	0.9365	0.9411	0.9980	0.9494

Table S3: continued

two-way ANOVA Dunnett's multiple comparisons test (compared to pT1ab)

	pT2ab	pT3ab	pT4ab	undefined
440 nm	0.9753	>0.9999	0.0013	0.8187
460 nm	0.9973	0.9997	0.0056	0.9270
525 nm	>0.9999	0.9998	0.8949	0.9987
565 nm	0.9984	0.9948	0.7556	0.9988
620 nm	>0.9999	>0.9999	>0.9999	>0.9999

two-way ANOVA Dunnett's multiple comparisons test (compared to pT2ab)

	pT1ab	pT3ab	pT4ab	undefined
440 nm	0.9753	0.9798	0.0088	0.4024
460 nm	0.9973	0.9742	0.0161	0.7221
525 nm	>0.9999	0.9997	0.9151	0.9982
565 nm	0.9984	0.9999	0.9236	>0.9999
620 nm	>0.9999	>0.9999	>0.9999	>0.9999

Two-way ANOVA Dunnett's multiple comparisons test (compared to pT3ab)

	pT1ab	pT2ab	pT4ab	Undefined
440 nm	>0.9999	0.9821	0.0009	0.7722
460 nm	0.9997	0.9771	0.0016	0.9838
525 nm	0.9998	0.9997	0.7988	0.9999
565 nm	0.9958	>0.9999	0.9443	0.9998
620 nm	>0.9999	>0.9999	>0.9999	>0.9999

Two-way ANOVA Dunnett's multiple comparisons test (compared to pT4ab)

	pT1ab	pT2ab	pT3ab	Undefined
440 nm	0.0013	0.0091	0.0009	<0.0001
460 nm	0.0058	0.0169	0.0016	<0.0001
525 nm	0.9107	0.9287	0.8095	0.6806
565 nm	0.7822	0.9358	0.9443	0.8890
620 nm	>0.9999	>0.9999	>0.9999	>0.9999

Two-way ANOVA Dunnett's multiple comparisons test (compared to ulcerated MM)

	Non-ulcerated	Undefined
440 nm	0.1773	0.8218
460 nm	0.3978	0.6899
525 nm	0.9931	0.9033
565 nm	0.9965	0.9602
620 nm	0.9993	0.9956

Table S3: continued

Two-way ANOVA Dunnett's multiple comparisons test (compared to non-ulcerated MM)

	Ulcerated	Undefined
440 nm	0.1945	0.4163
460 nm	0.4335	0.9176
525 nm	0.9946	0.9674
565 nm	0.9972	0.9900
620 nm	0.9994	0.9994

Two-way ANOVA Dunnett's multiple comparisons test (compared to presented melan A marker)

	Non-presented melan A	Undefined
440 nm	0.5472	0.7332
460 nm	0.4514	0.9420
525 nm	0.9016	0.9999
565 nm	0.9984	0.9996
620 nm	>0.9999	0.9999

Two-way ANOVA Dunnett's multiple comparisons test (compared to non-presented melan A marker)

	Presented melan A	Undefined
440 nm	0.5536	0.1108
460 nm	0.4574	0.1911
525 nm	0.9046	0.8626
565 nm	0.9985	>0.9999
620 nm	>0.9999	0.9990

Multiple *t*-test two-stage linear step-up procedure of Benjamini, Krieger and Yekutieli, and Holm–Sidak method ($\lambda_{EM} = 565$ nm)

	pT1ab	pT2ab	pT3ab	pT4ab	Undefined
pT1ab		<0.000001	0.000003	<0.000001	0.026418
pT2ab			0.665611	0.000025	0.614438
pT3ab				0.000053	0.510804
pT4ab					0.000153
Undefined					

p-Values of fluorescence intensities compared between groups.