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Supplementary Figure 2. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and malignant melanoma of skin. The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

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Supplementary Figure 6. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ. The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

Supplementary Figure 7. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of face. The slope of each line corresponding to the estimated

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Supplementary Figure 8. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and childhood sunburn on melanoma in situ of trunk. The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

Supplementary Figure 9. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and childhood sunburn on melanoma in situ of lowerlimb. The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

Supplementary Figure 10. Scatter plots of the univariable mendelian randomization analysis of childhood sunburn and childhood sunburn on melanoma in situ of upperlimb. The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

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Supplementary Figure 12. Scatter plots of the replicate univariable mendelian randomization analysis of childhood sunburn and non-melanoma skin cancer (controls excluding all cancers). The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

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Supplementary Figure 16. Scatter plots of the replicate univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of lowerlimb (controls excluding all cancers). The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.

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Supplementary Figure 18. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and malignant melanoma of skin. Calculate the MR results of the remaining IVs after removing the IVs one by one.

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Supplementary Figure 23. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of face. Calculate the MR results of the remaining IVs after removing the IVs one by one.

Supplementary Figure 24. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of trunk. Calculate the MR results of the remaining IVs after removing the IVs one by one.

Supplementary Figure 25. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of lowerlimb. Calculate the MR results of the remaining IVs after removing the IVs one by one.

Supplementary Figure 26. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of upperlimb. Calculate the MR results of the remaining IVs after removing the IVs one by one.

Supplementary Figure 27. Leave-one-out stability tests of the replicate univariable mendelian randomization analysis of childhood sunburn and malignant melanoma of skin (controls excluding all cancers). Calculate the MR results of the remaining IVs after removing the IVs one by one.

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Supplementary Figure 30. Leave-one-out stability tests of the replicate univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of face (controls excluding all cancers). Calculate the MR results of the remaining IVs after removing the IVs one by one.

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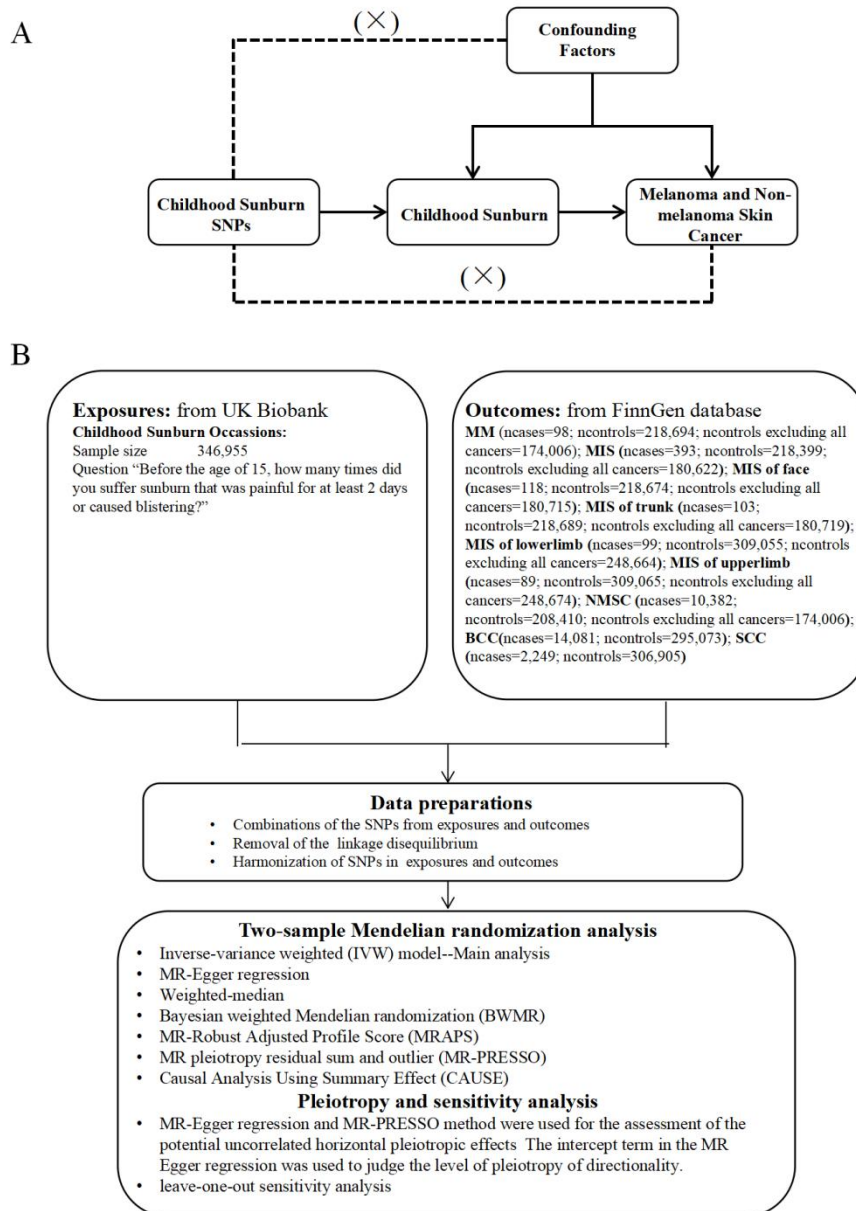
Supplementary Figure 33. Leave-one-out stability tests of the replicate univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of upperlimb (controls excluding all cancers). Calculate the MR results of the remaining IVs after removing the IVs one by one.

Supplementary Figure 34. The forest plot of the CAUSE method MR analysis. Causal estimates were given as beta and 95% confidence intervals (CIs).

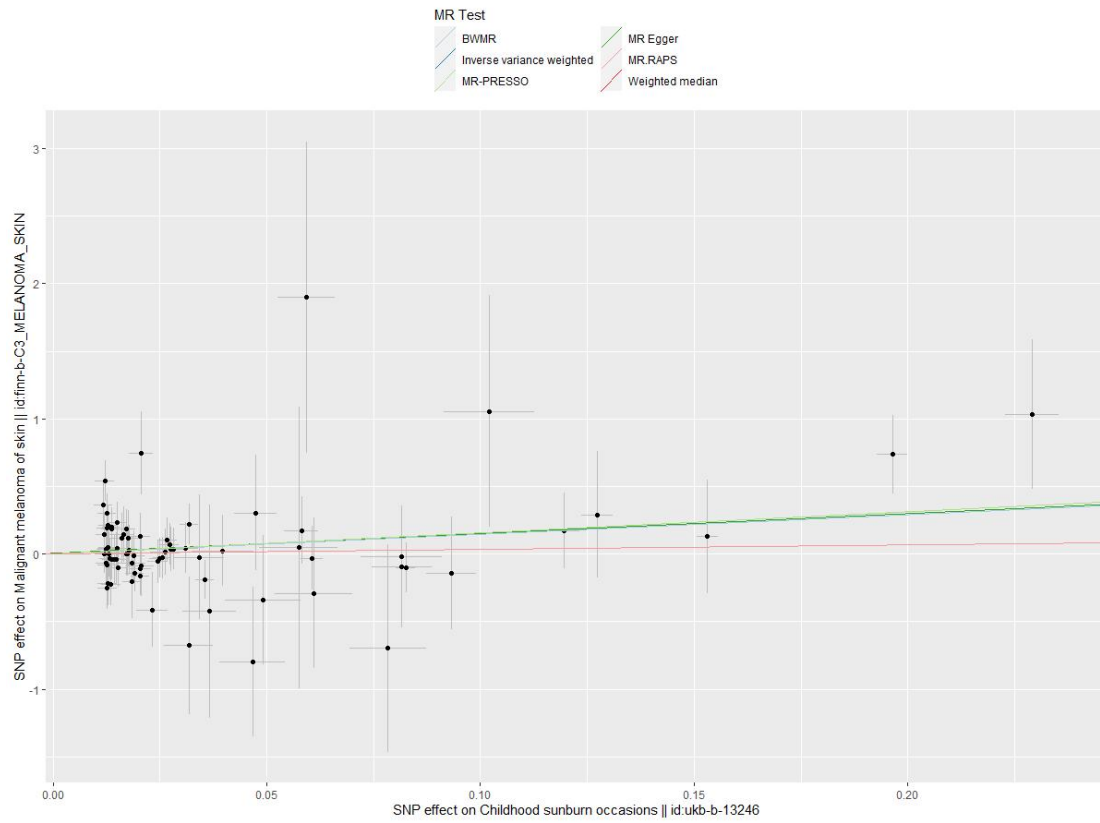
Supplementary Figure 35. The forest plot of the replicate CAUSE method MR analysis (controls excluding all cancers). Causal estimates were given as beta and 95% confidence intervals (CIs).

Supplementary Figure 36. The forest plot of the mediation MR analyses. Causal estimates given as odds ratio (OR) and 95% confidence intervals (CIs) for the effect of childhood sunburn and skin carcinoma risk. Red:total effect; Green: effect of skin colour; Purple: effect of serum vitamin D levels; Blue: effect of body mass index; Orange: effect of alcohol intake; Black: effect of smoking; Brown: effect of hair colour; Grey: effect of facial ageing.

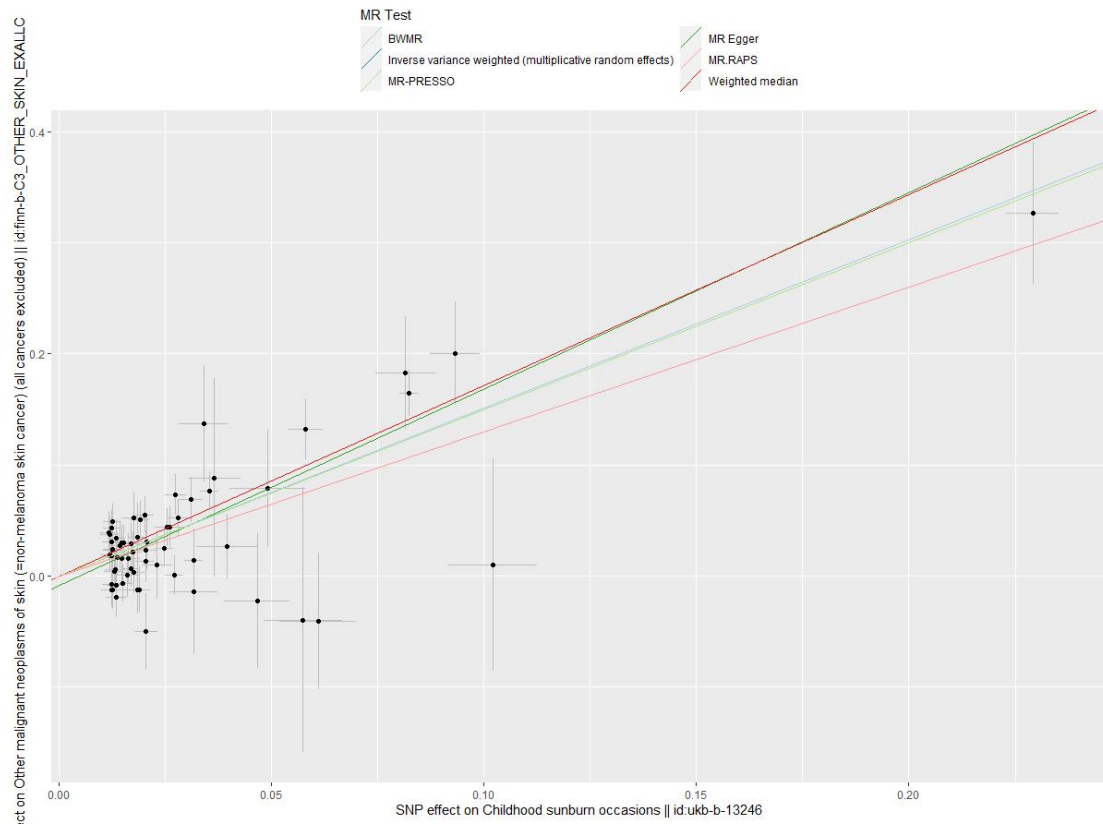
Supplementary Figure 37. The forest plot of the replicate mediation MR analyses (controls excluding all cancers). Causal estimates given as odds ratio (OR) and 95% confidence intervals (CIs) for the effect of childhood sunburn and skin carcinoma risk. Red:total effect; Green: effect of skin colour; Purple: effect of serum vitamin D levels; Blue: effect of body mass index; Orange: effect of alcohol intake; Black: effect of smoking; Brown: effect of hair colour; Grey: effect of facial ageing.



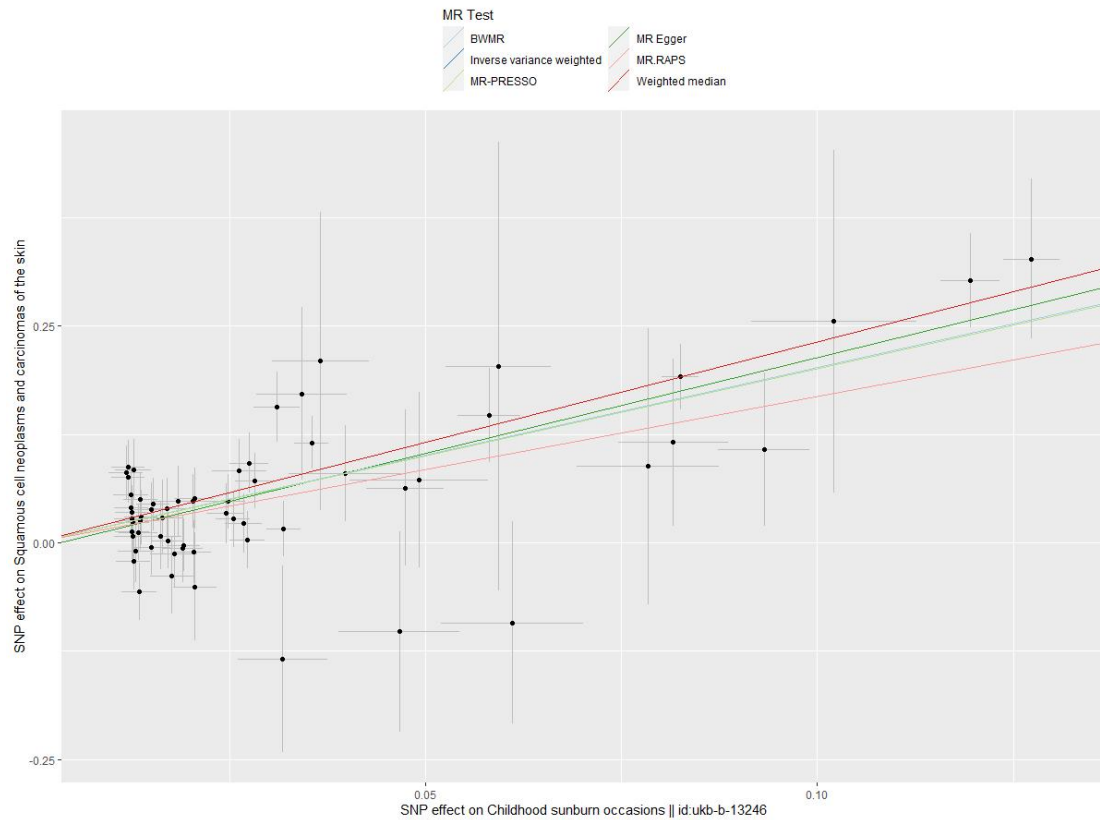
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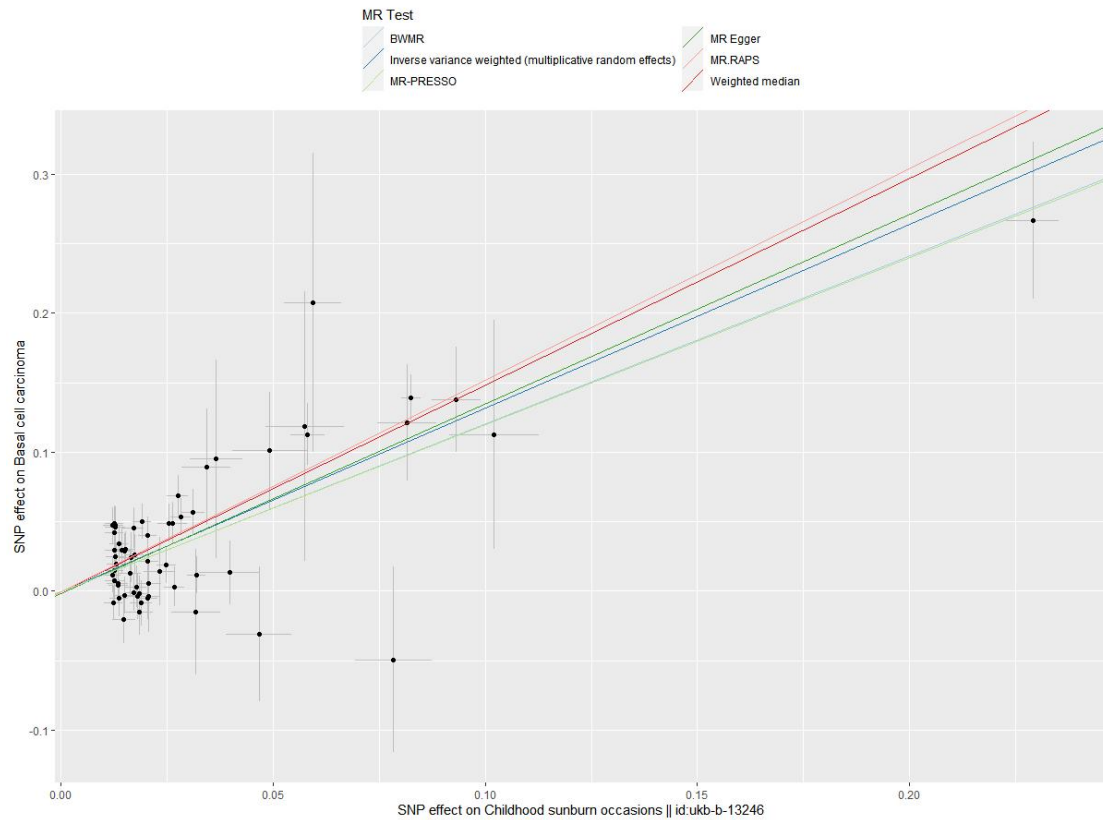
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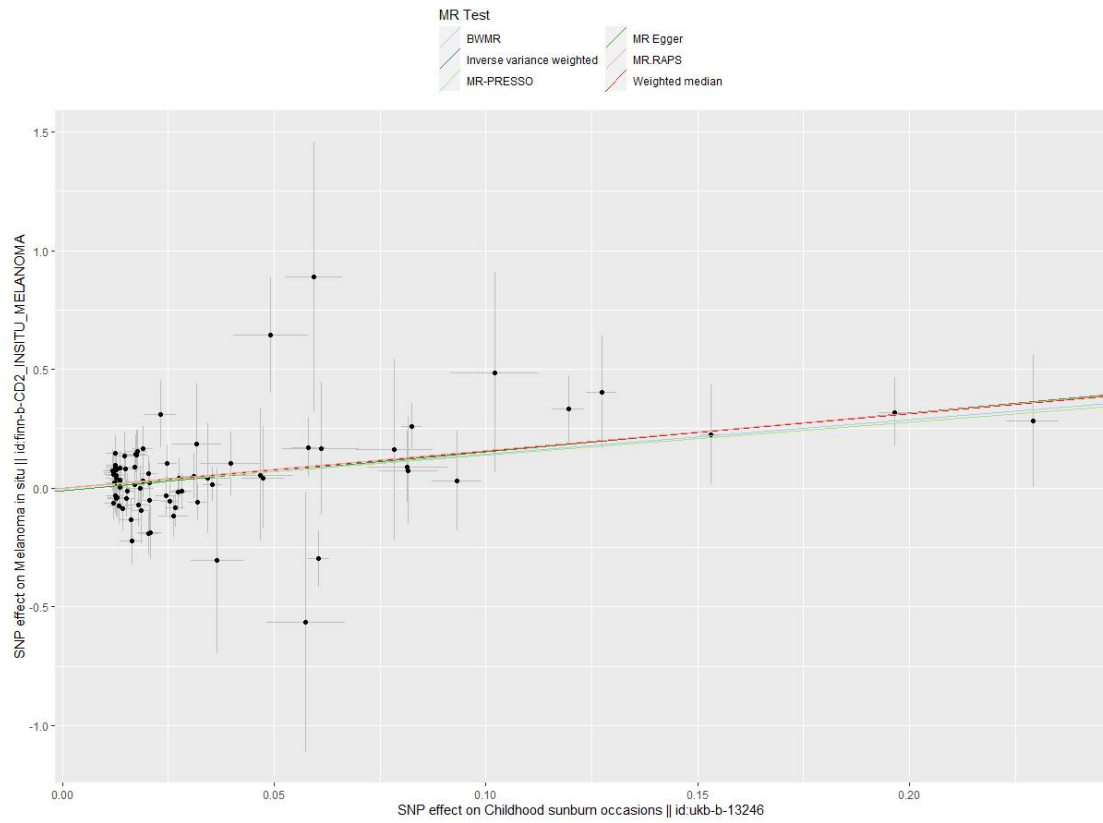
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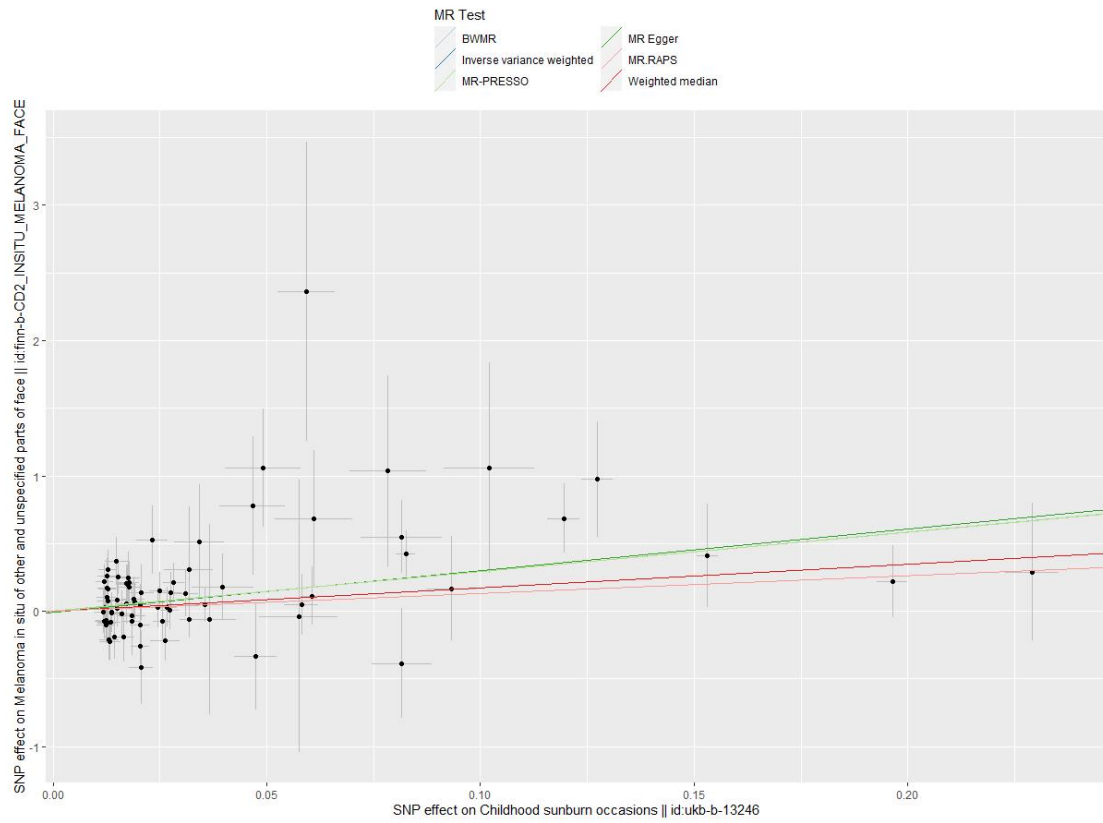
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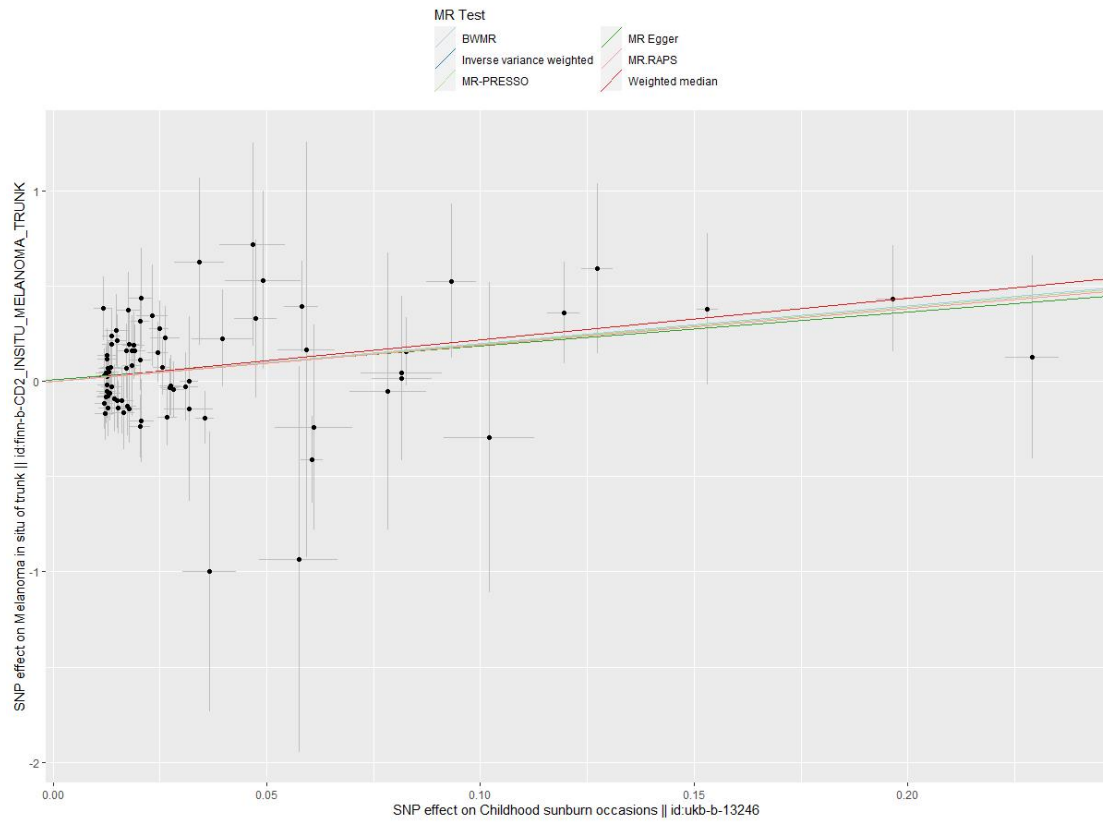
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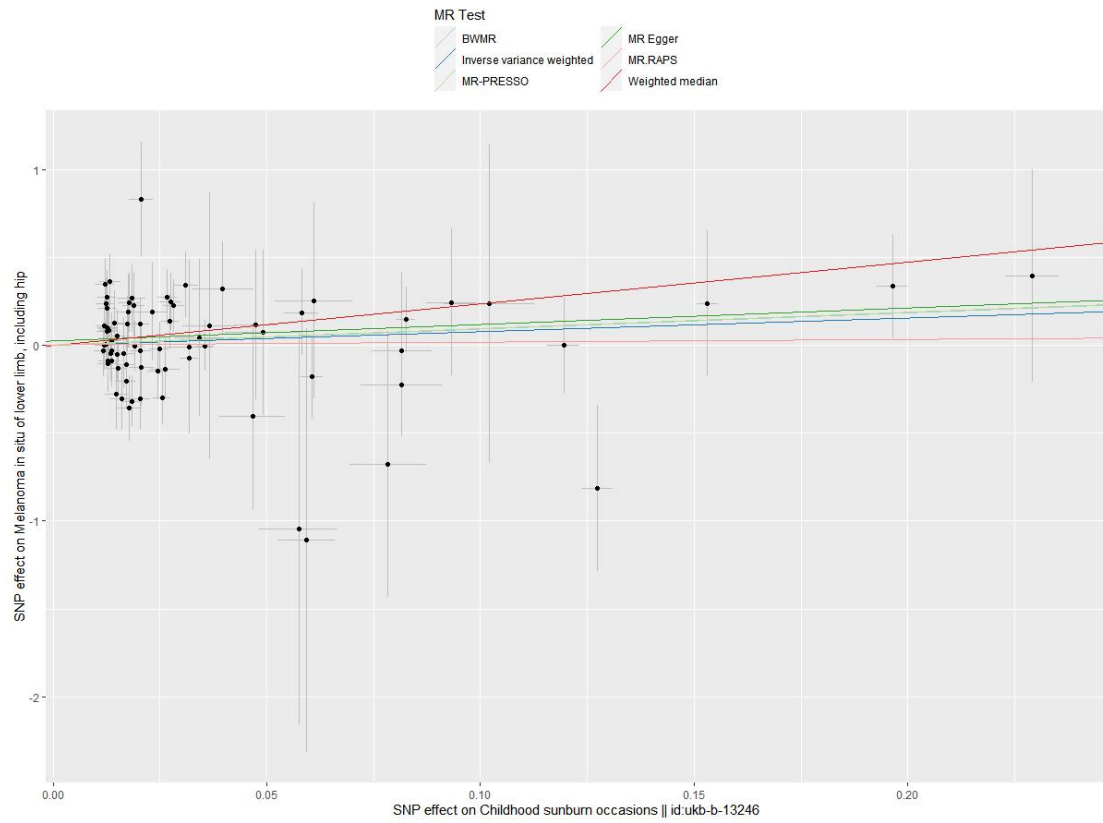
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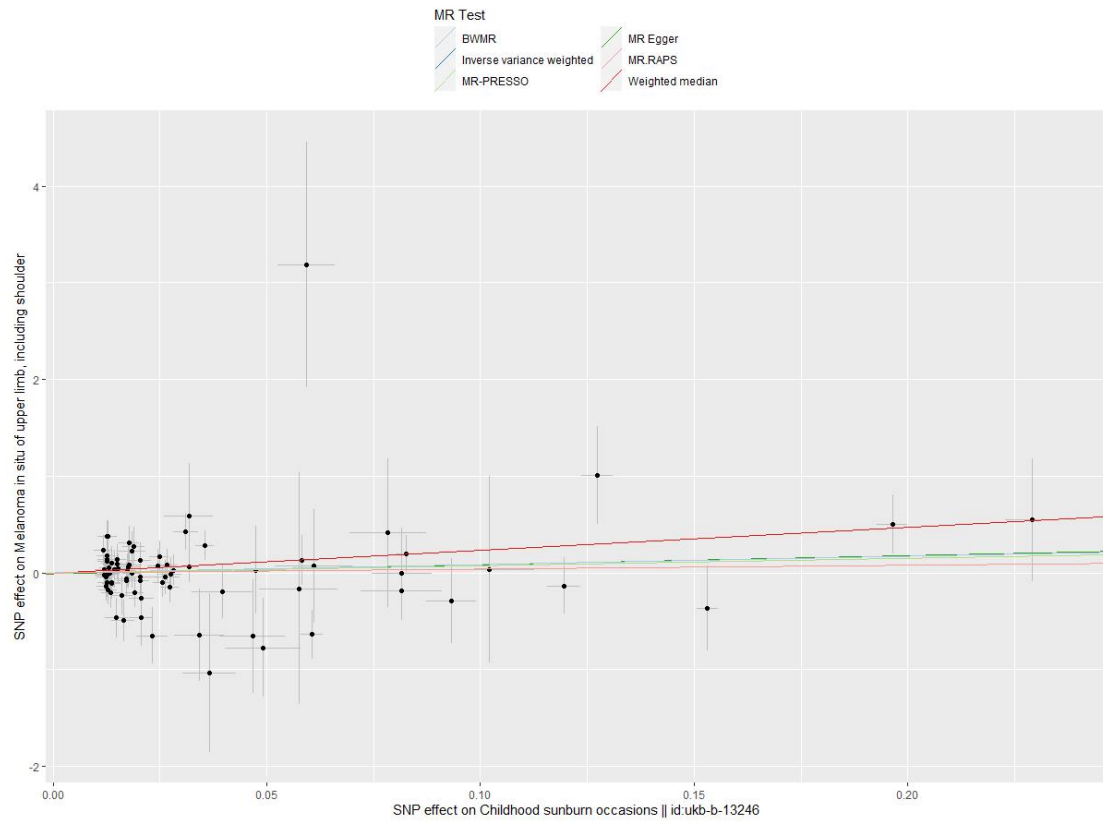
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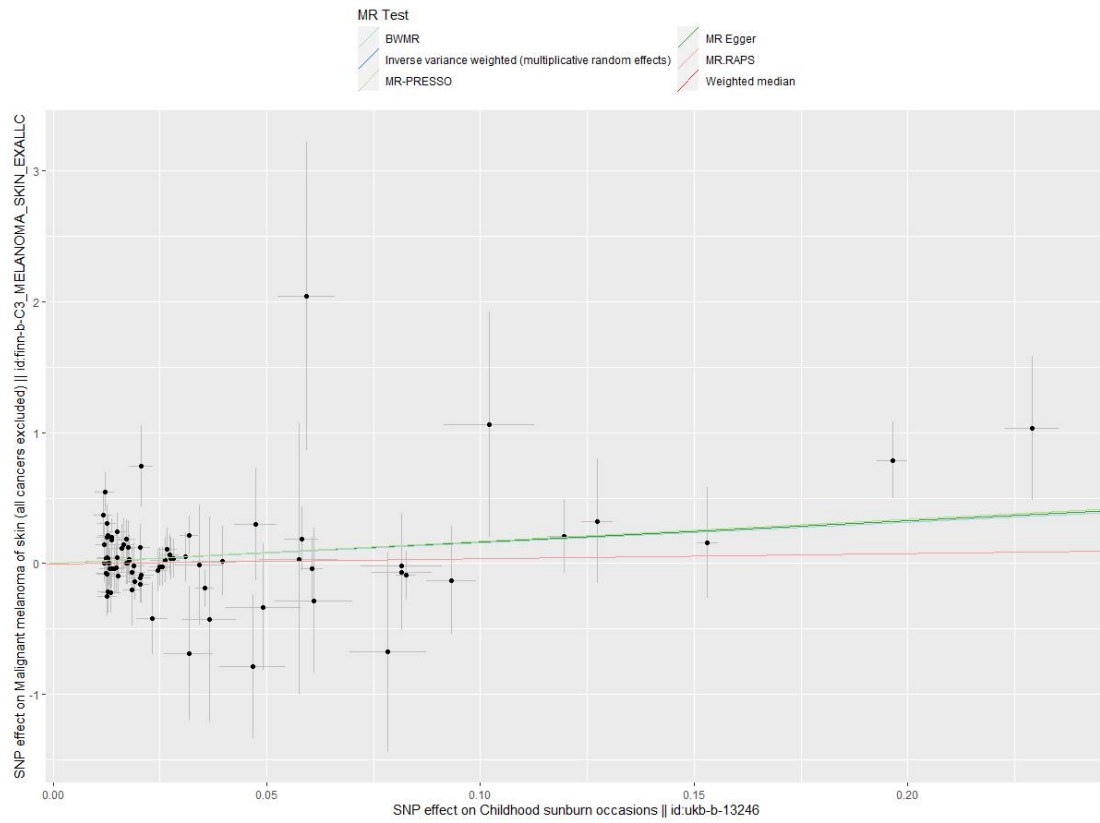
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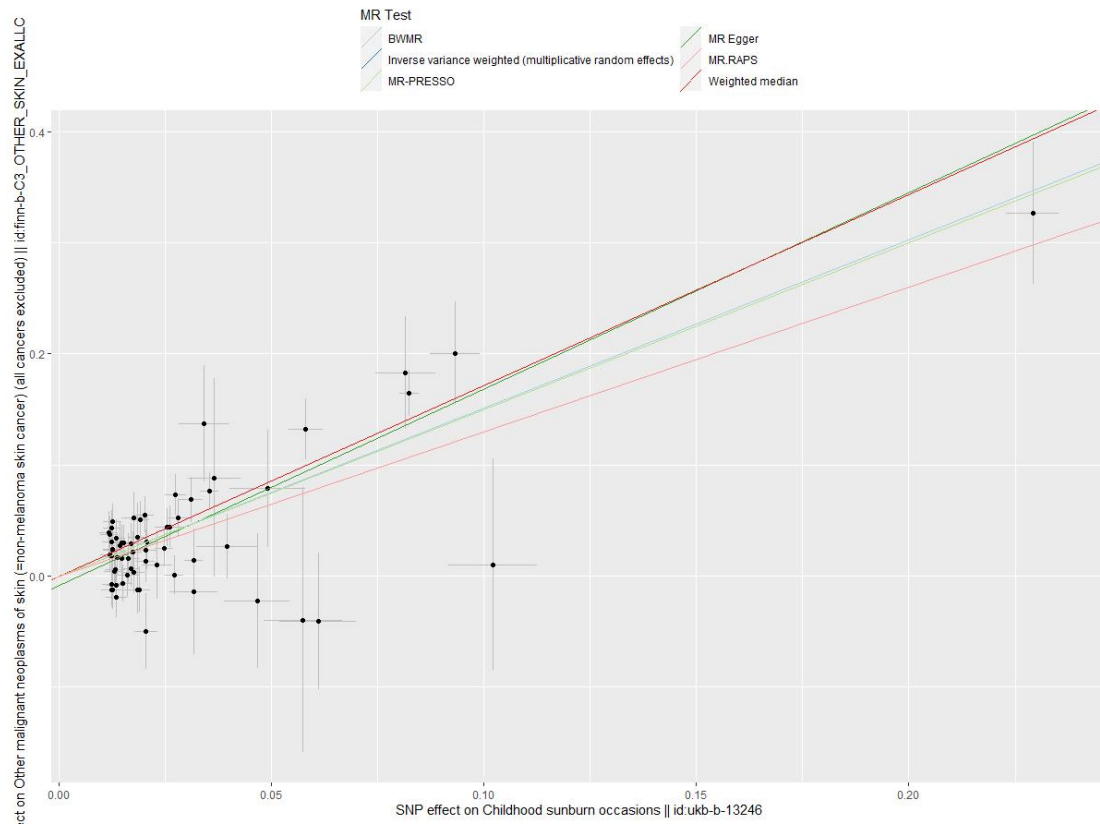
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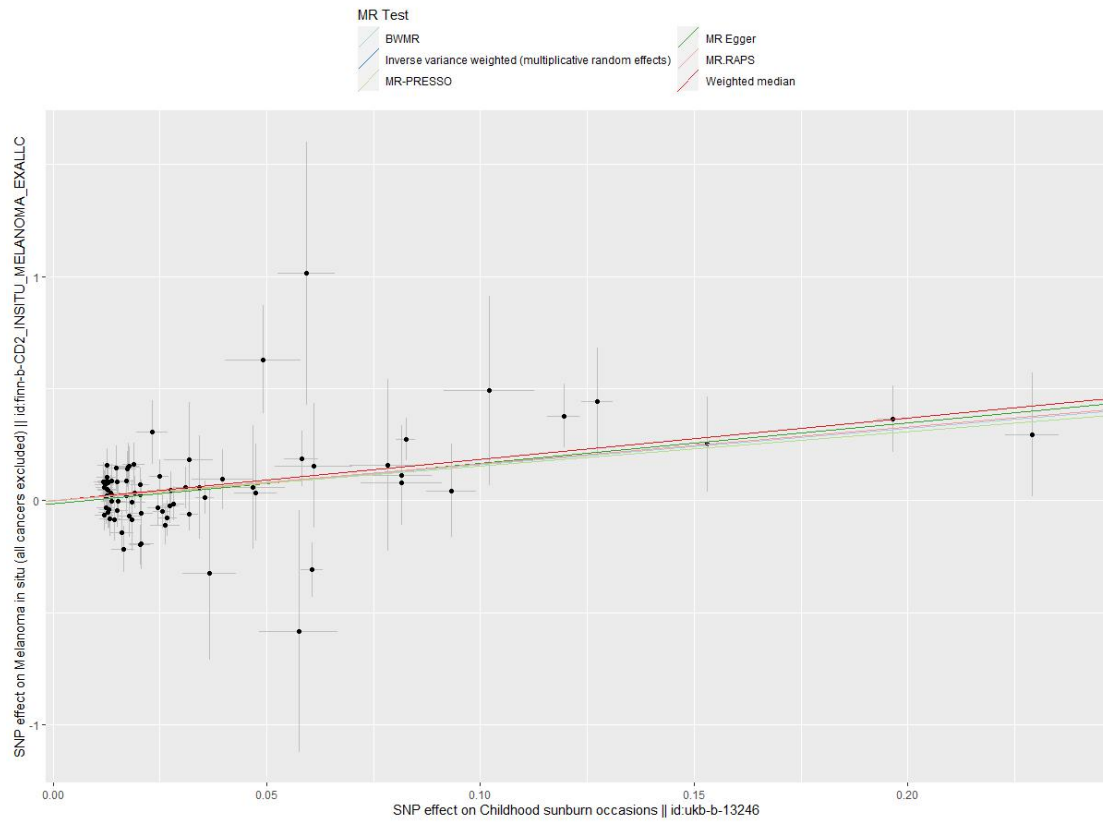
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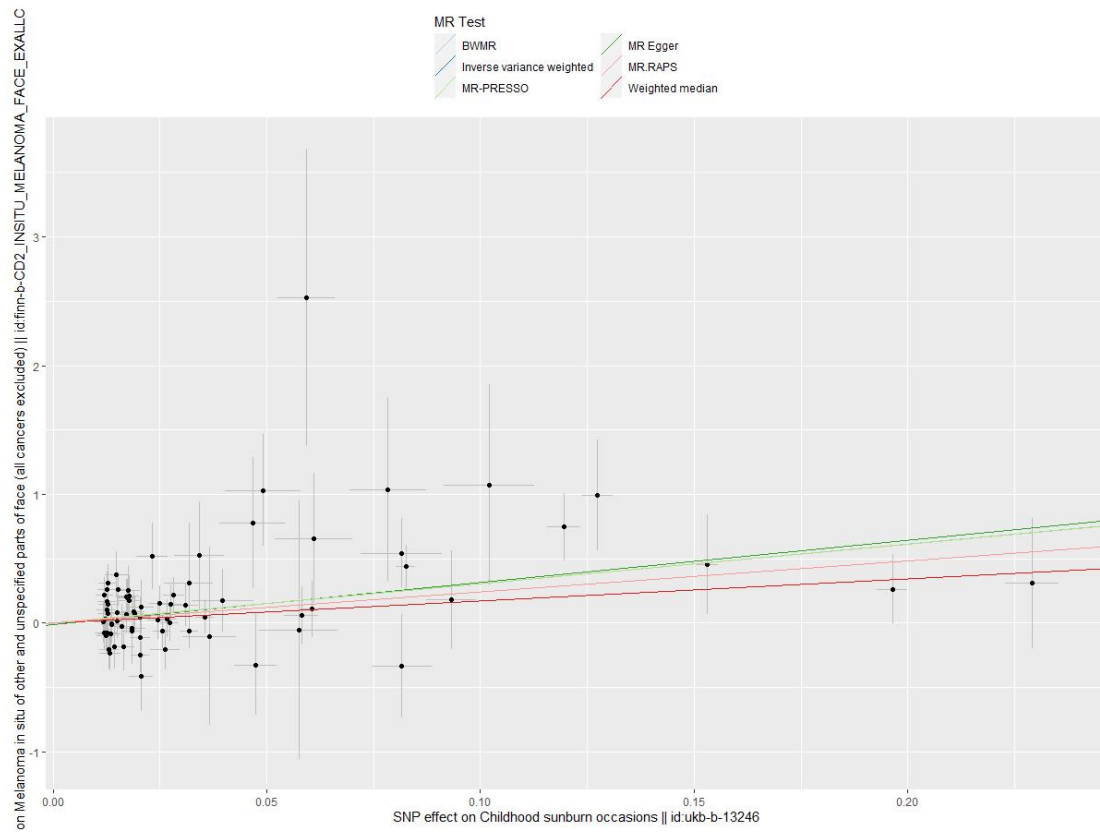
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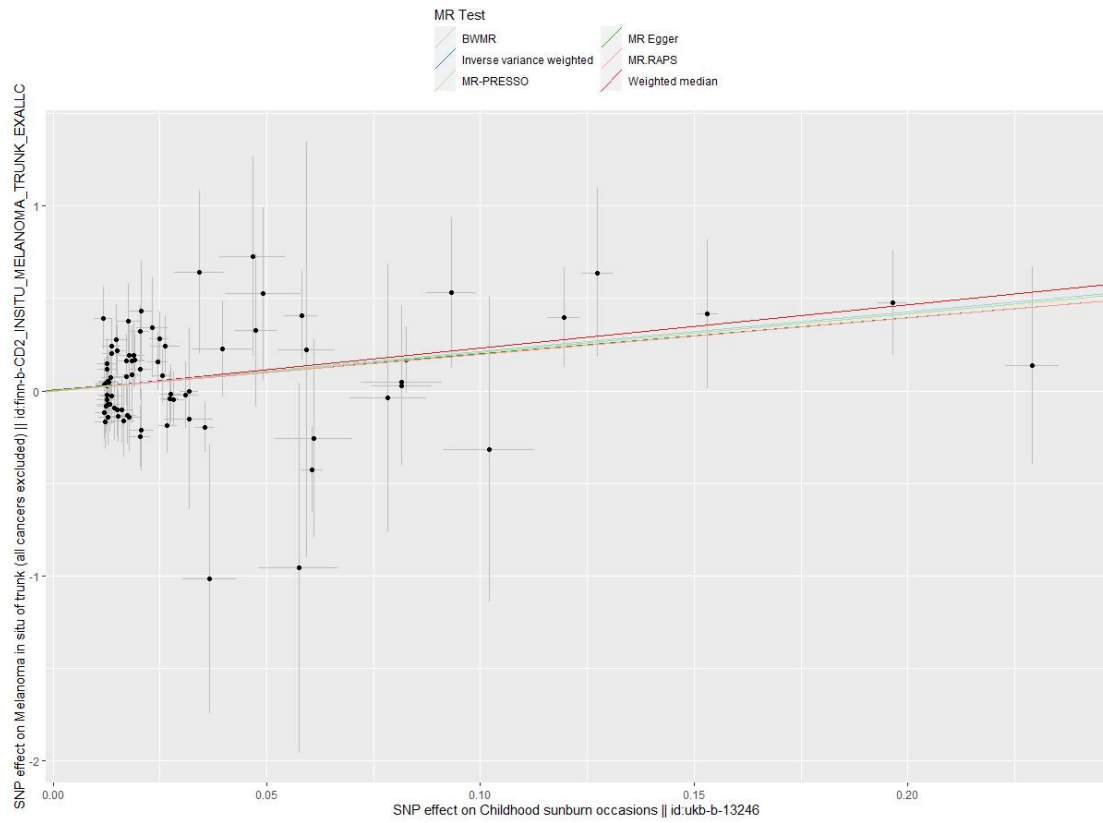
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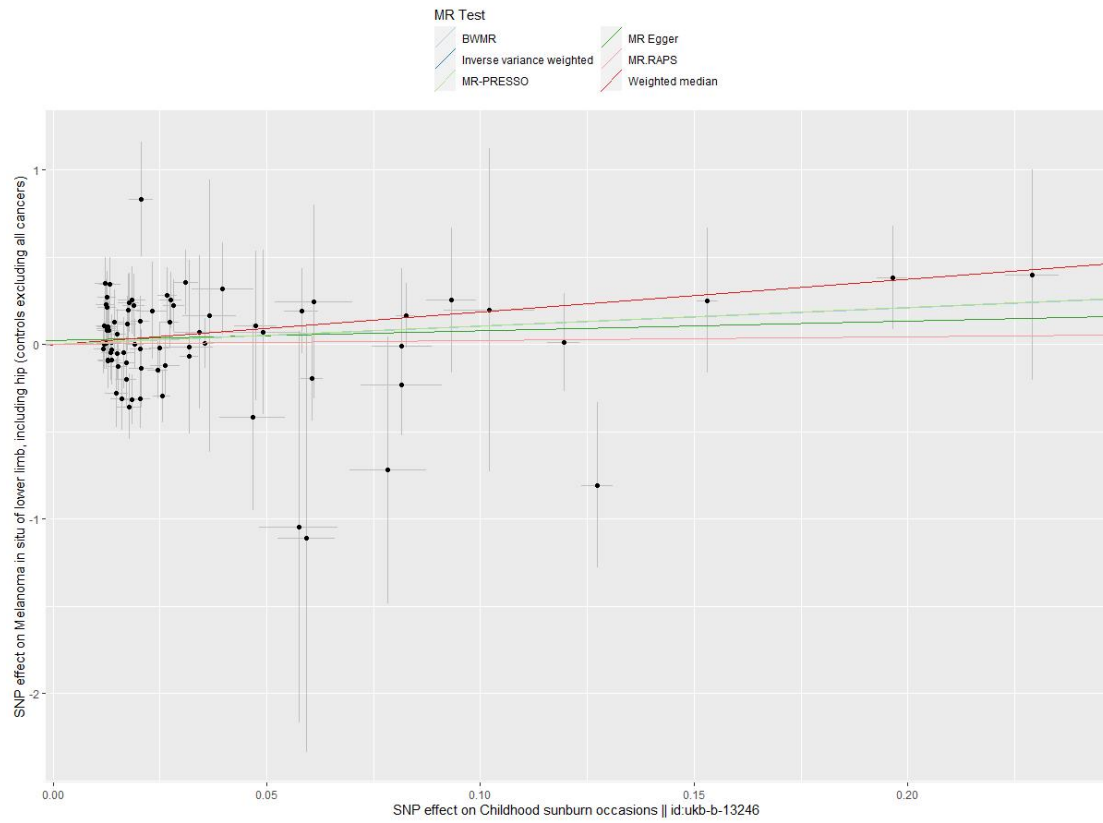
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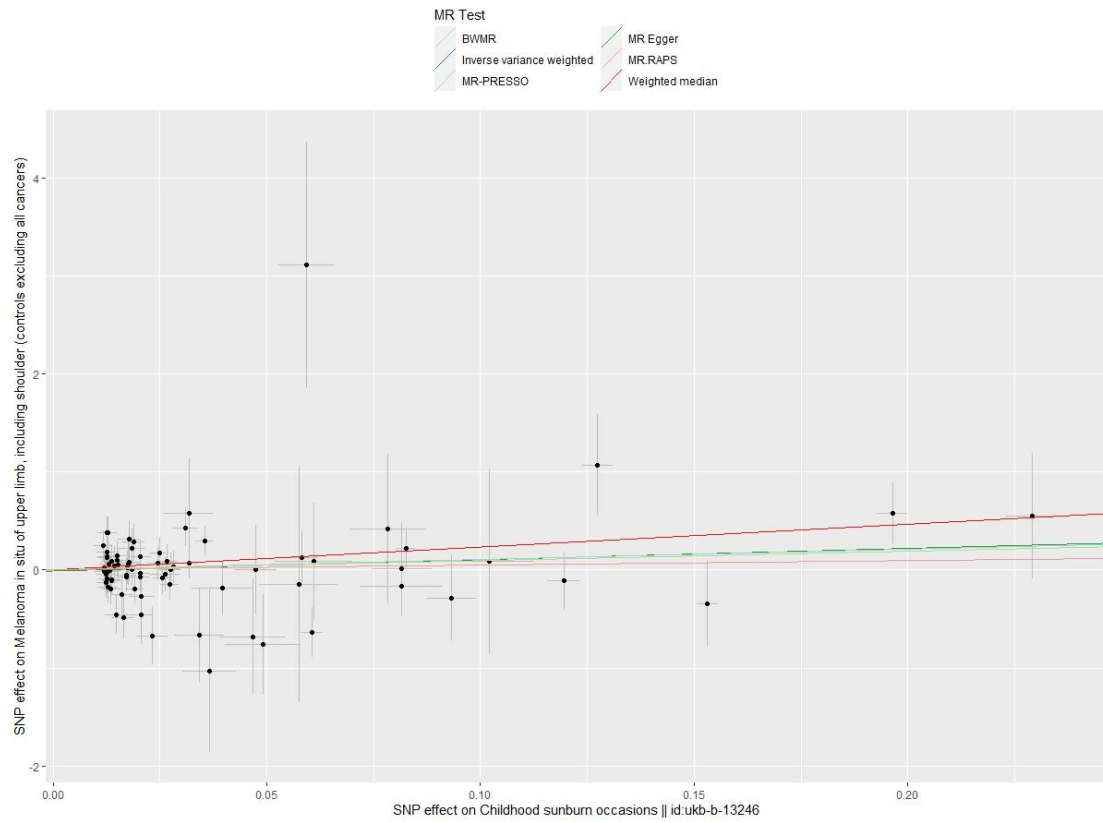
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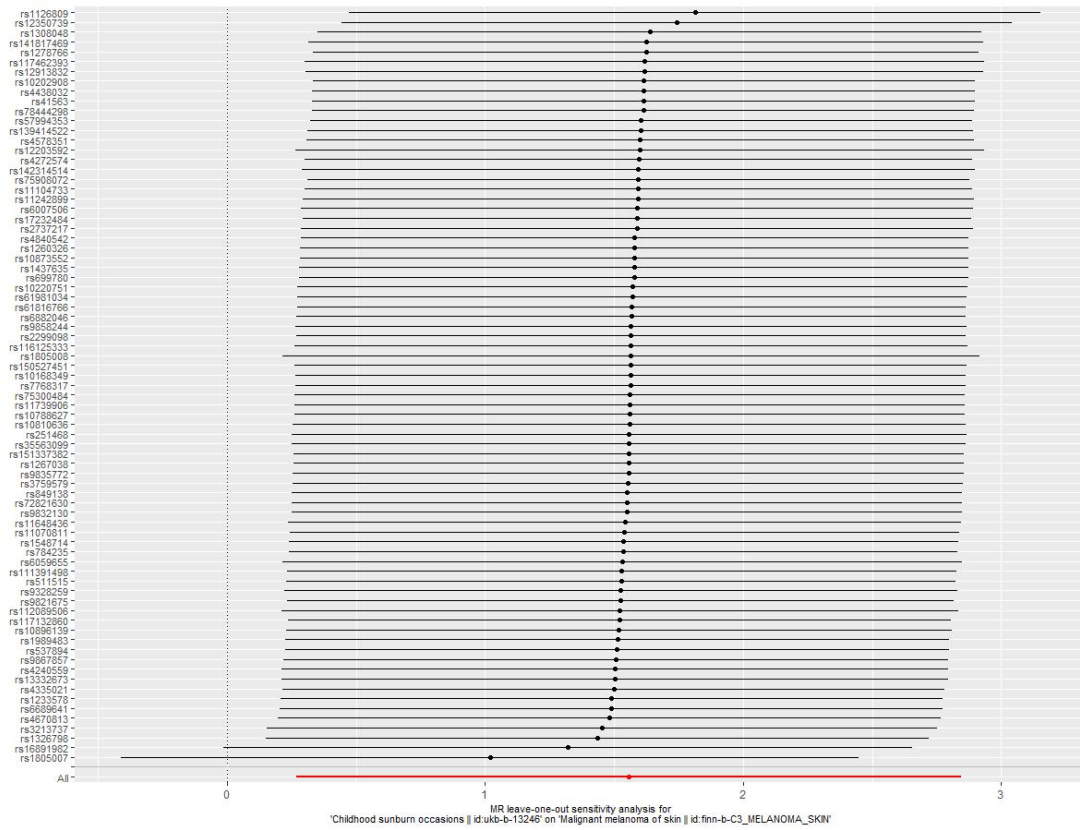
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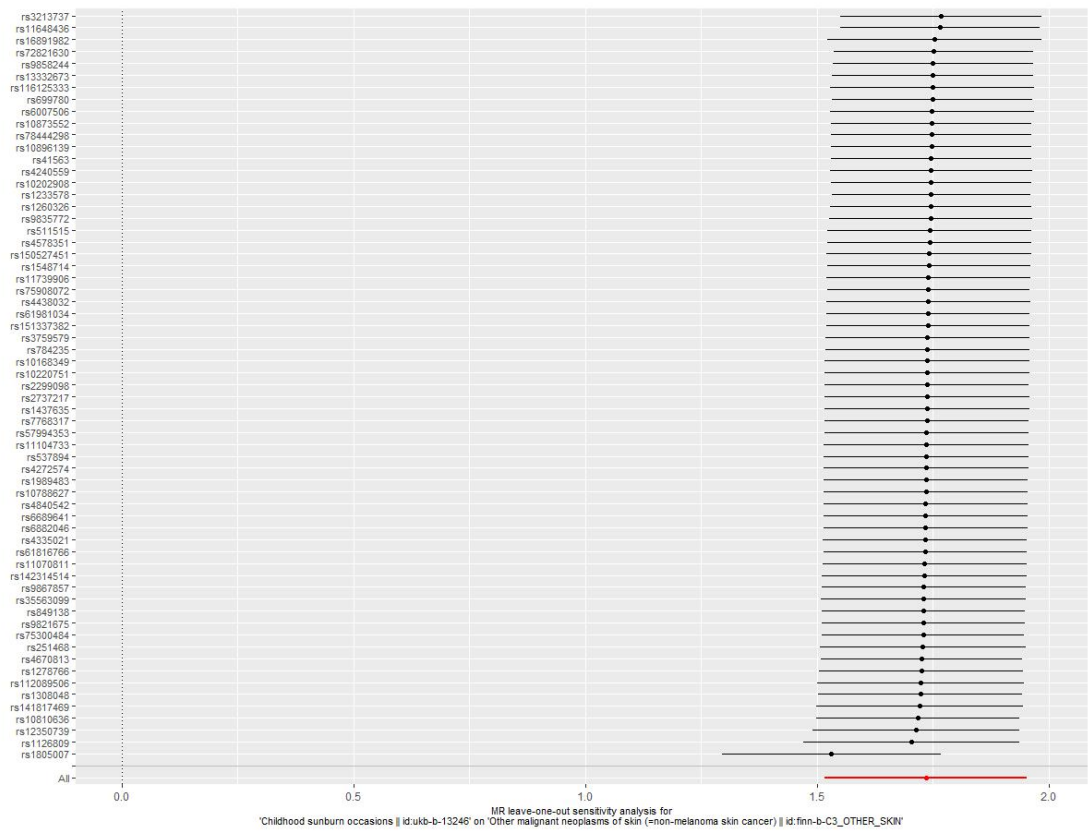
Supplementary Figure 16. Scatter plots of the replicate univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of lower limb (controls excluding all cancers). The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.



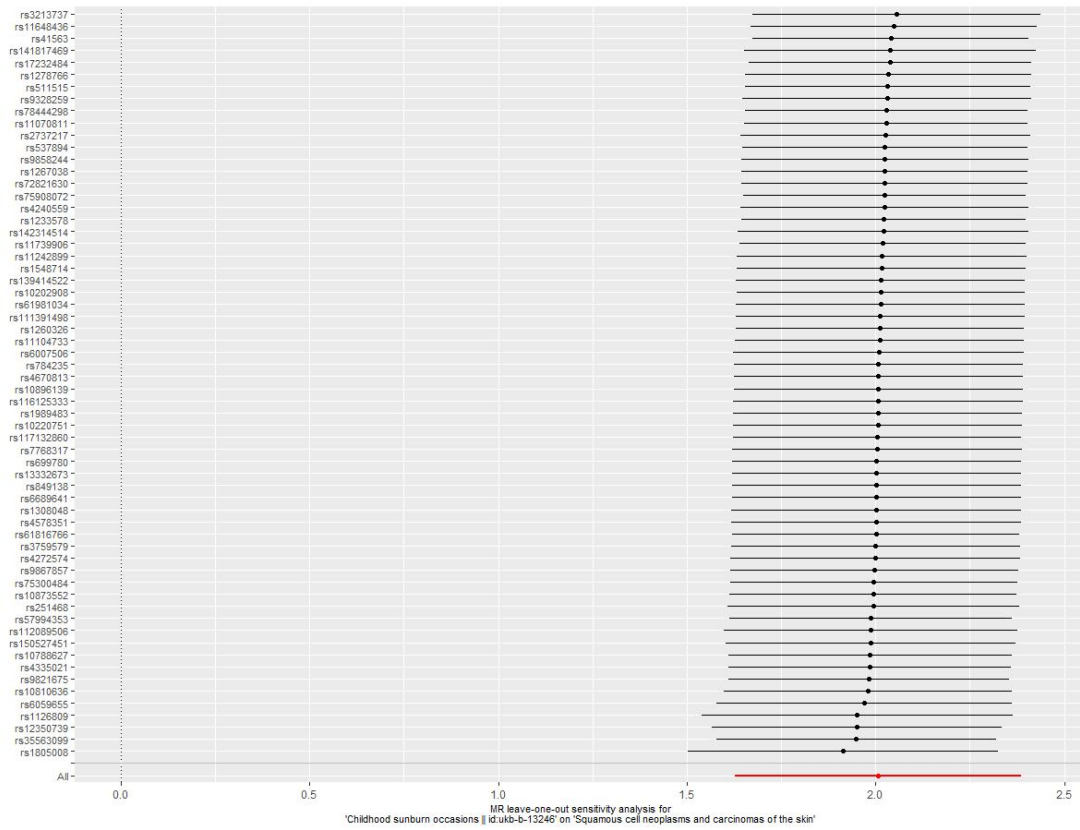
Supplementary Figure 17. Scatter plots of the replicate univariable mendelian randomization analysis of childhood sunburn and melanoma in situ of upper limb (controls excluding all cancers). The slope of each line corresponding to the estimated MR effect in different models, including the conventional IVW, MBE, WMM, MR-Egger, MR-RAPS and MR-PRESSO methods.



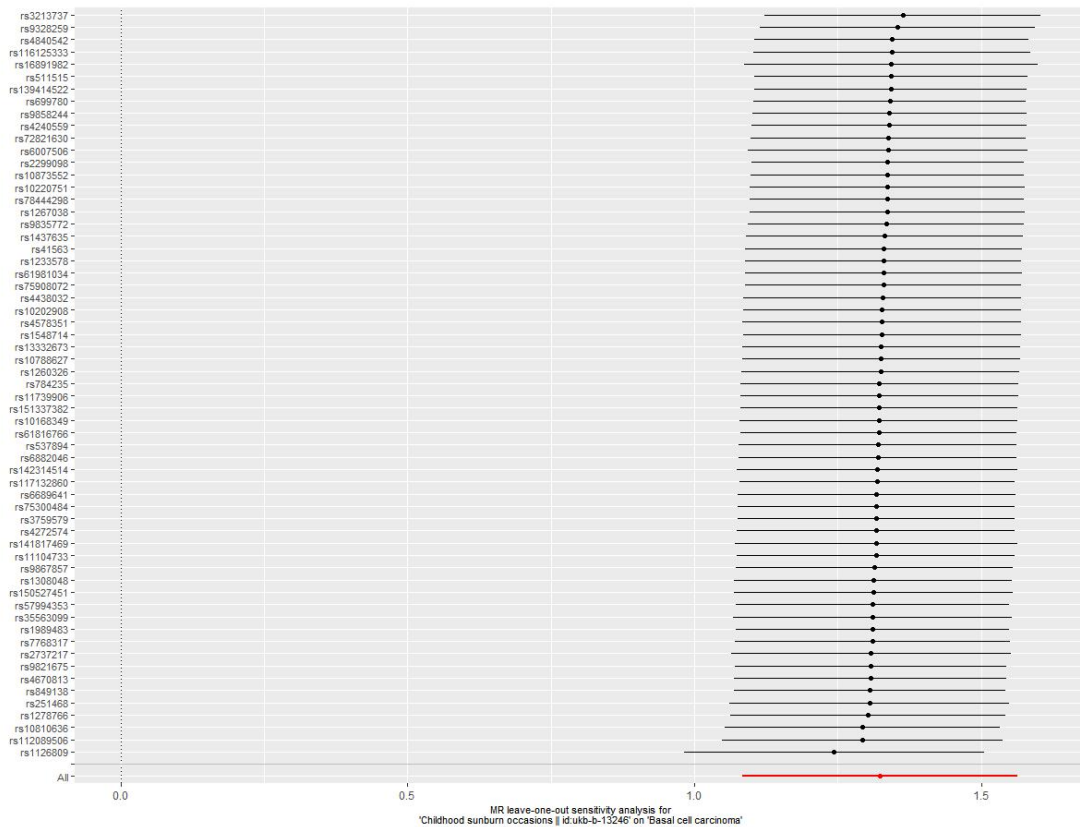
Supplementary Figure 18. Leave-one-out stability tests of the univariable mendelian randomization analysis of childhood sunburn and malignant melanoma of skin. Calculate the MR results of the remaining IVs after removing the IVs one by one.



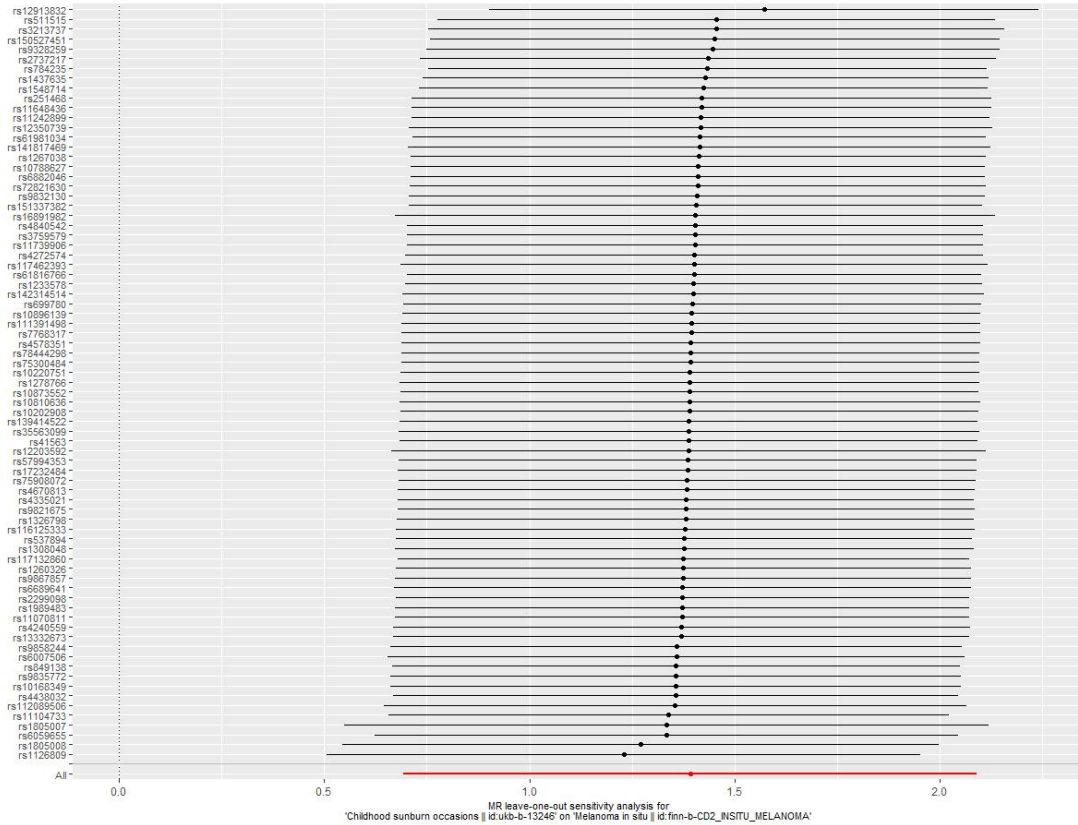
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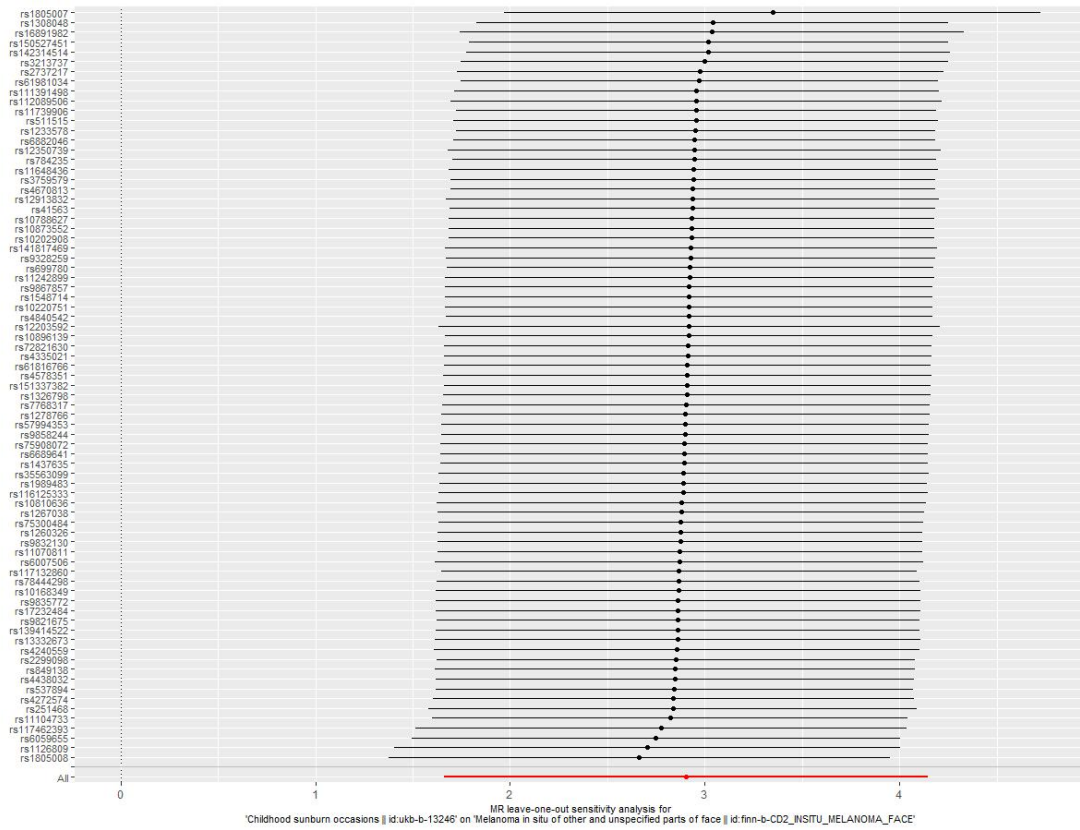
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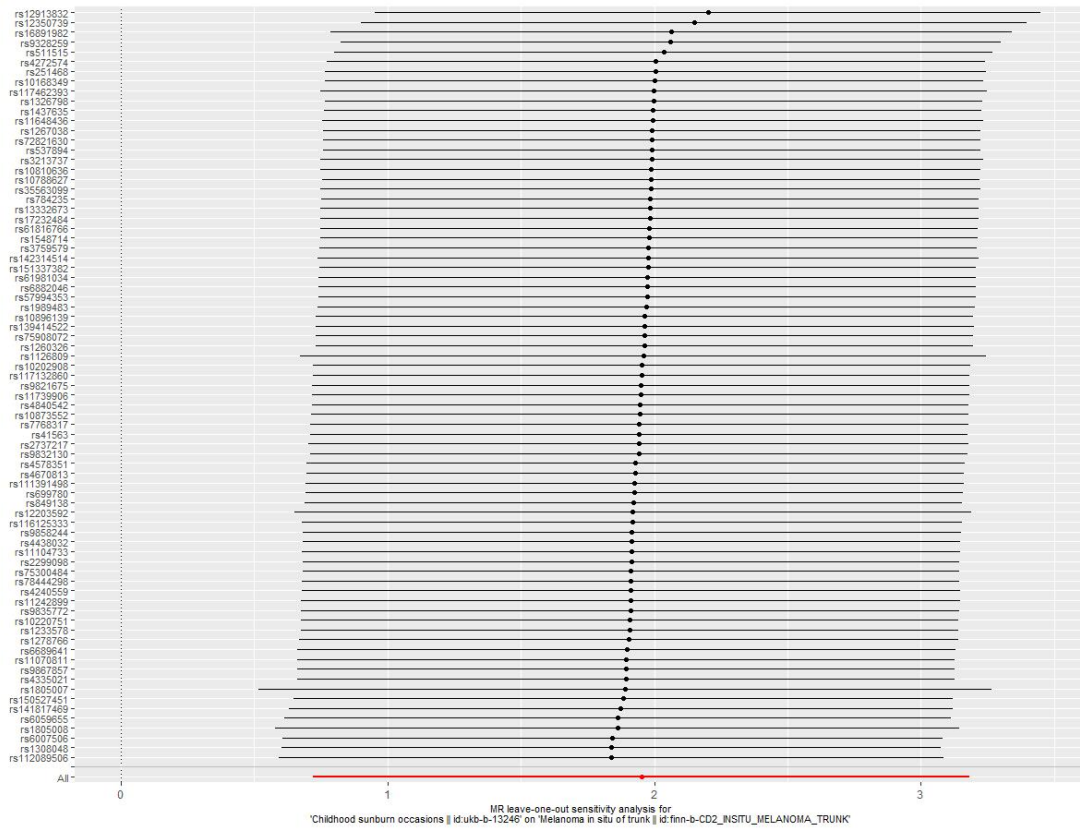
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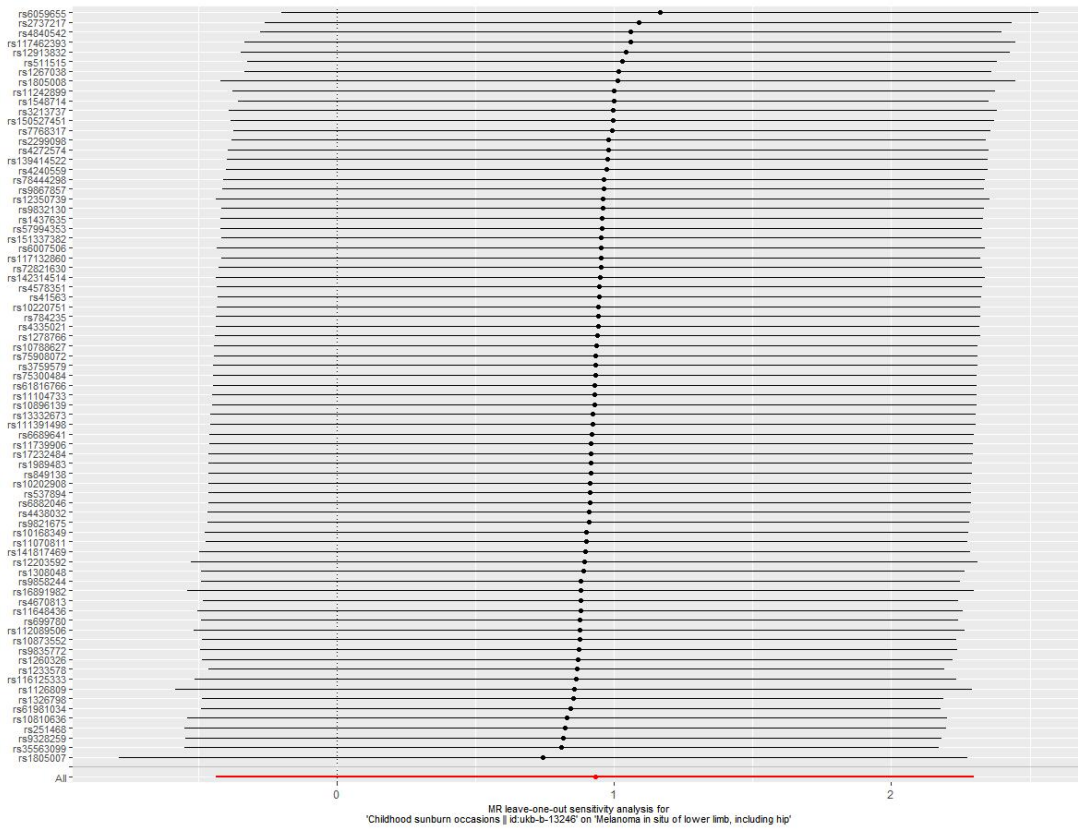
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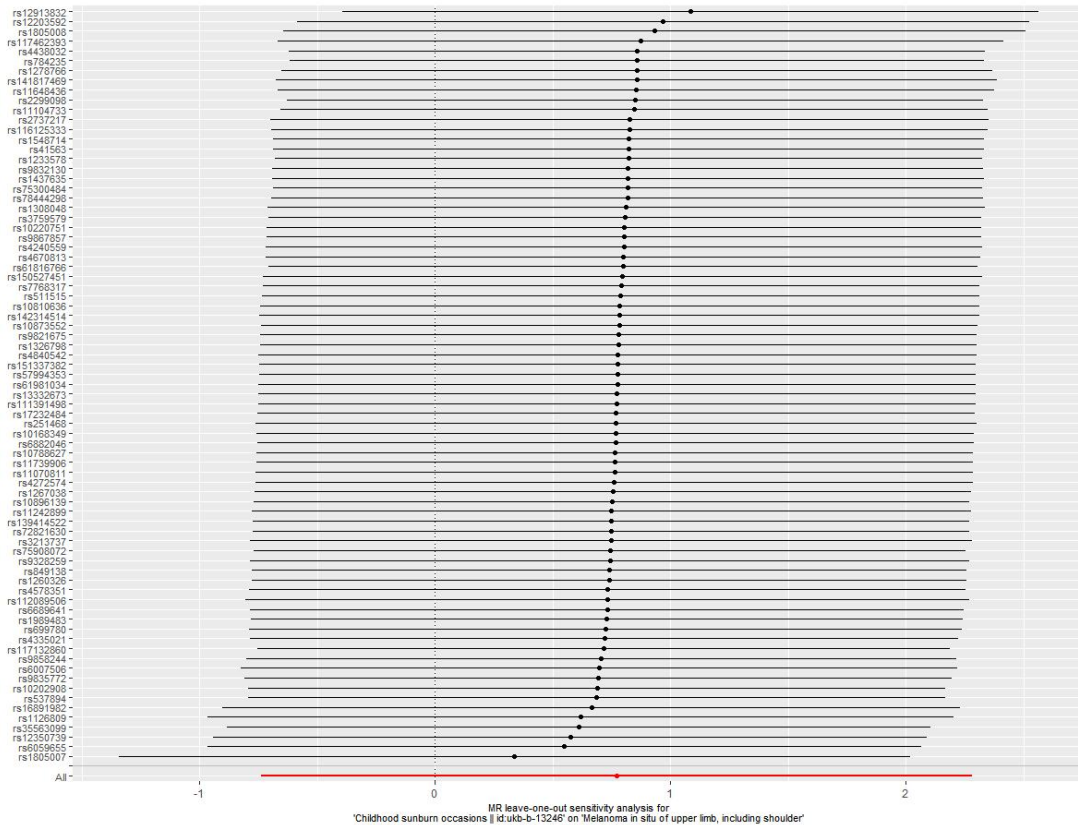
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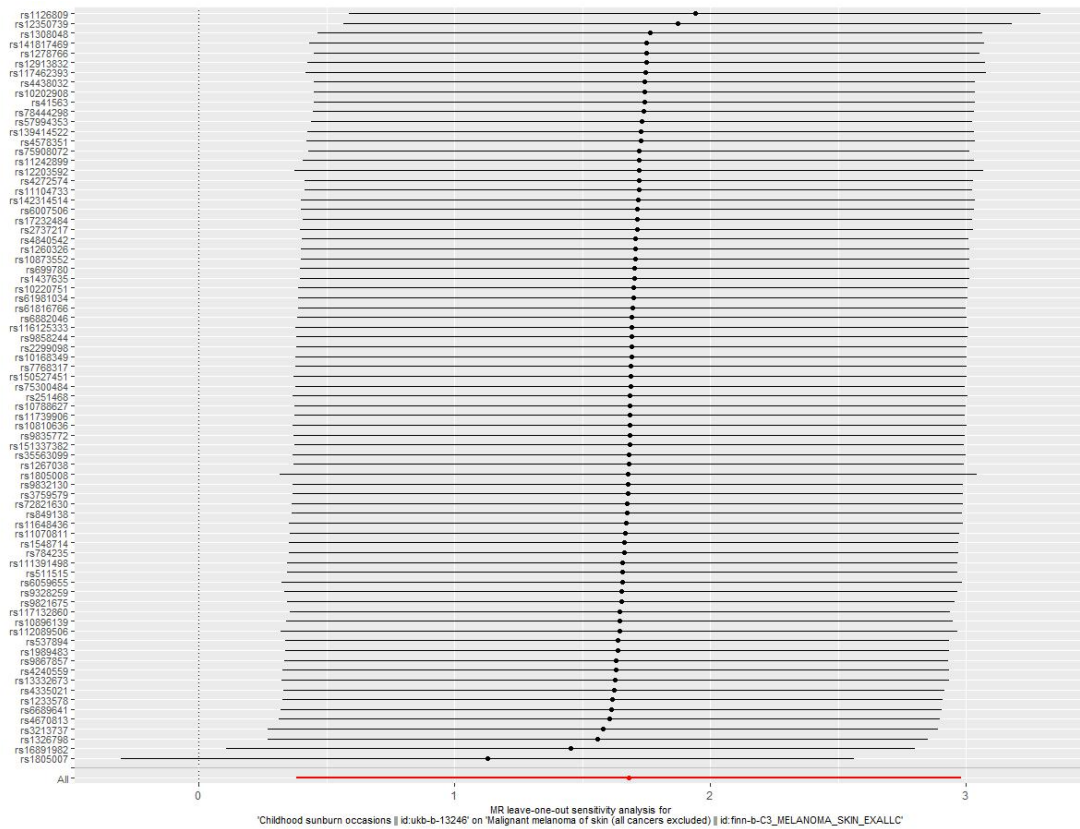
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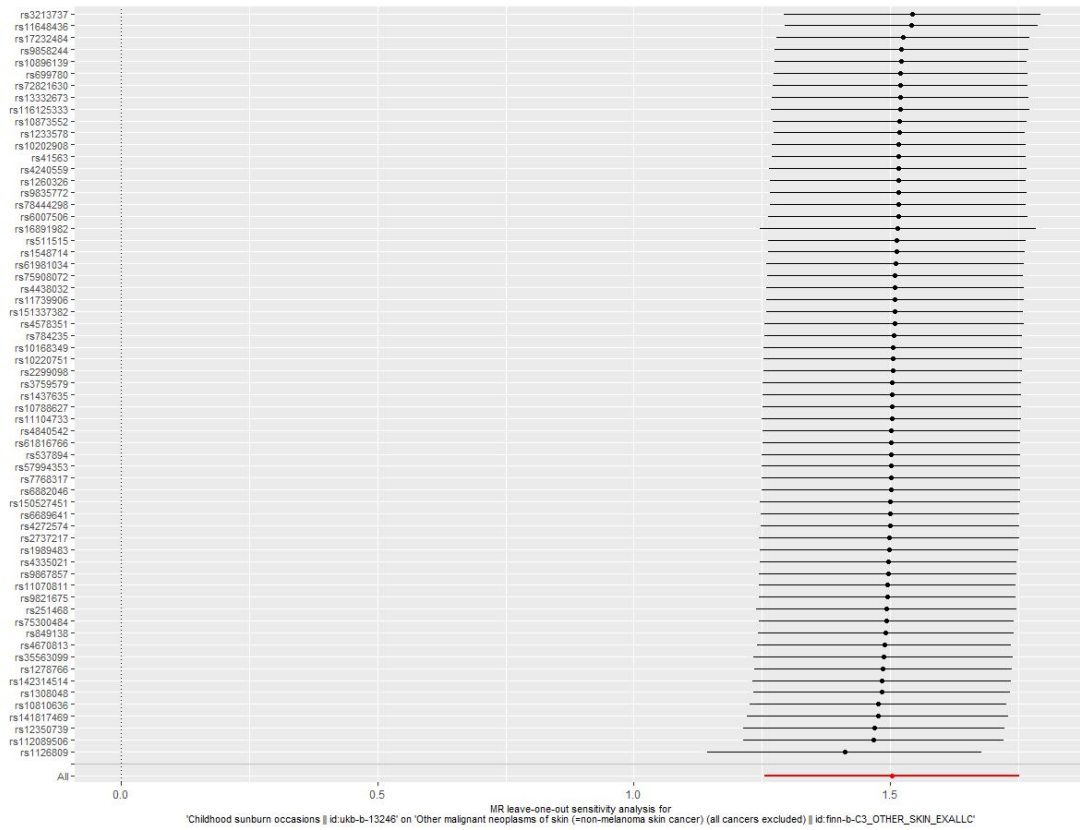
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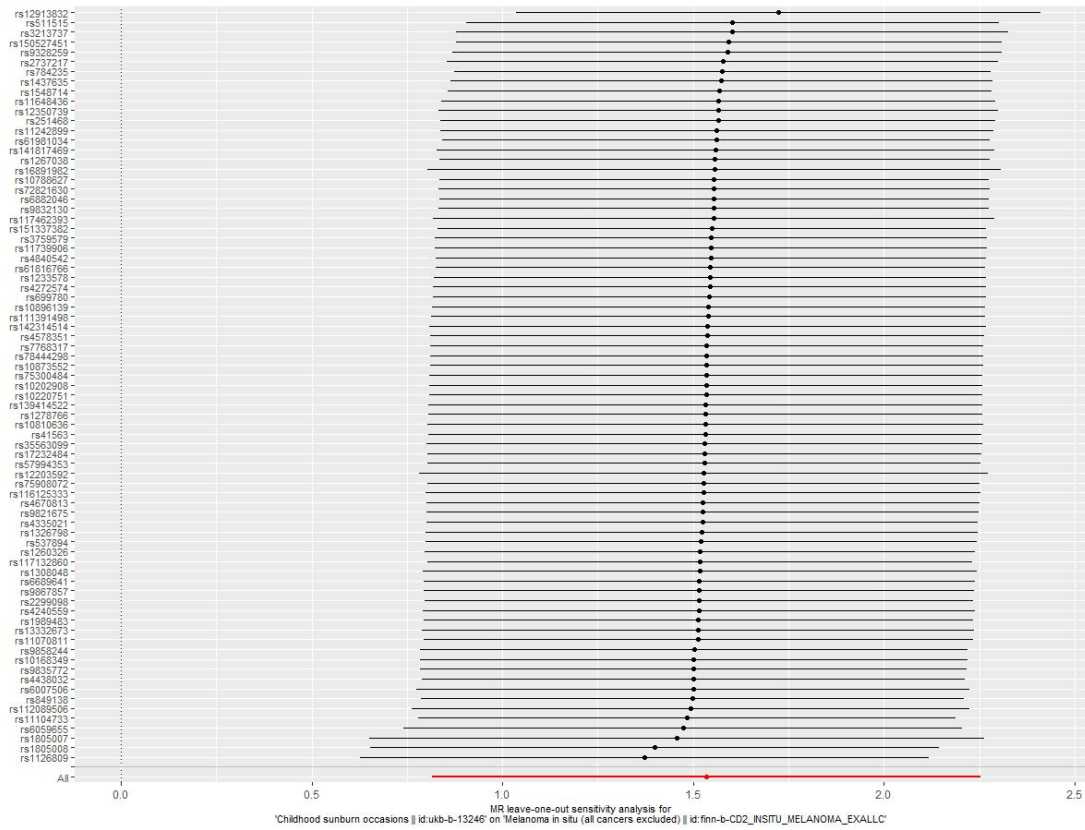
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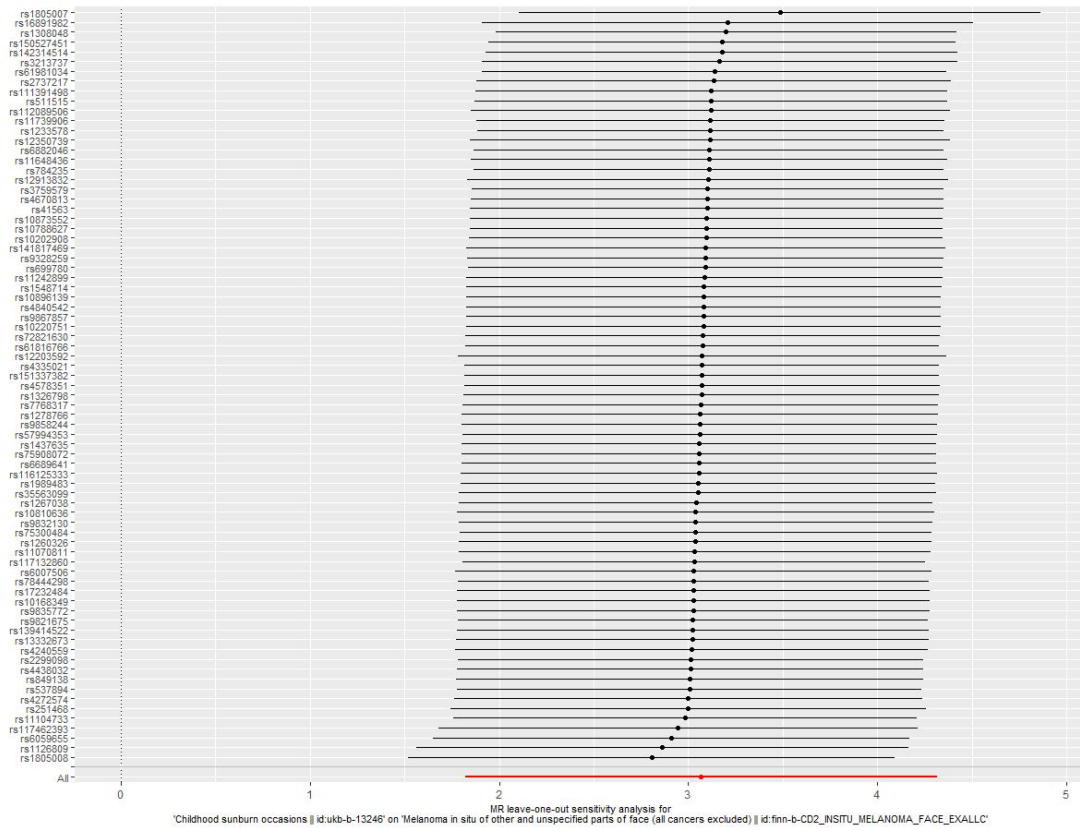
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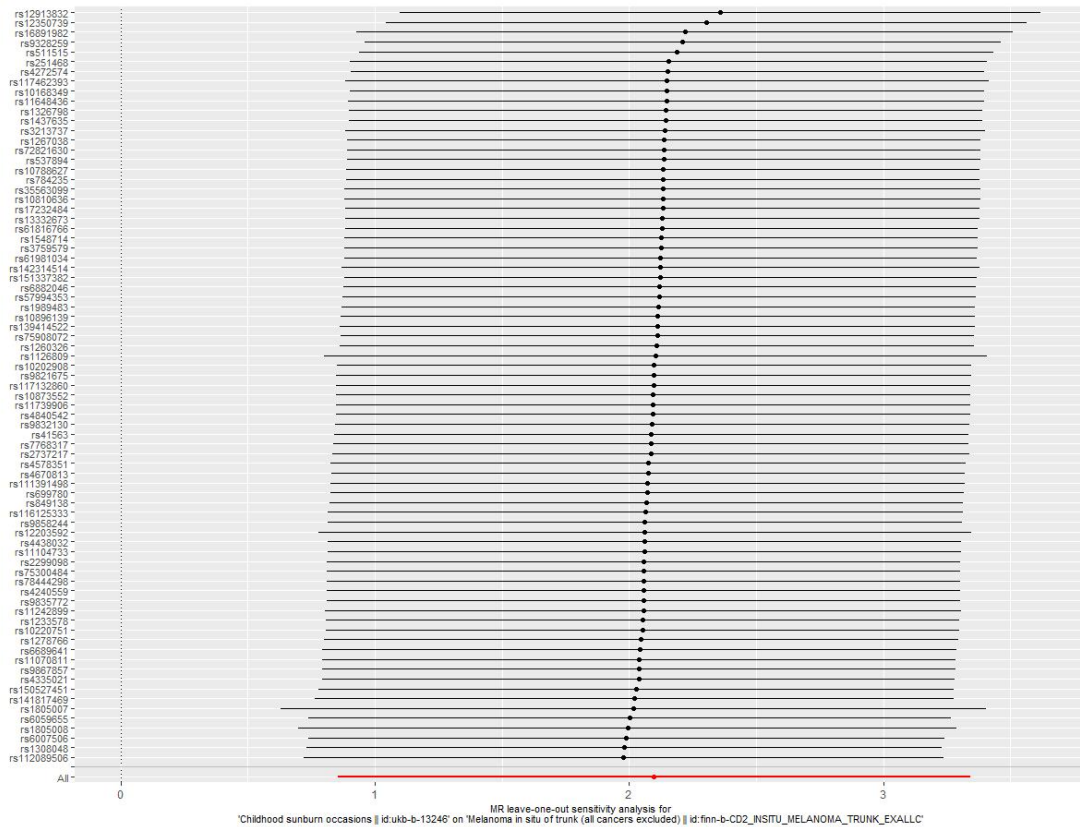
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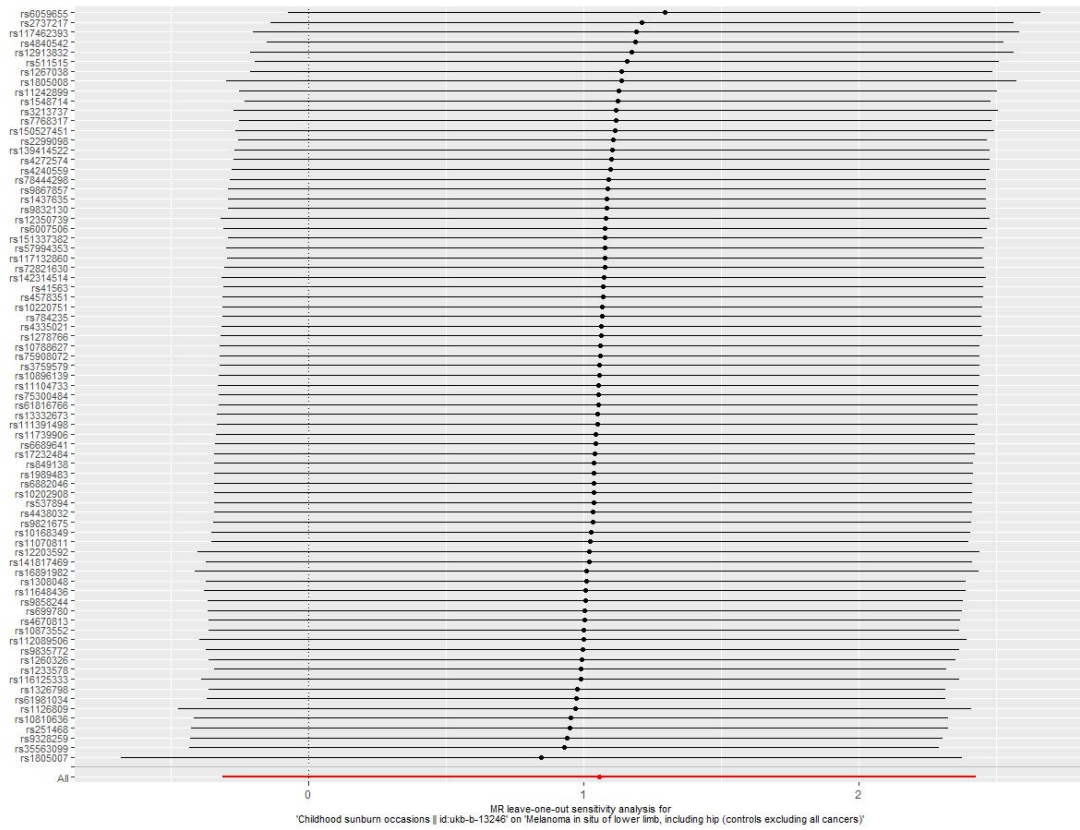
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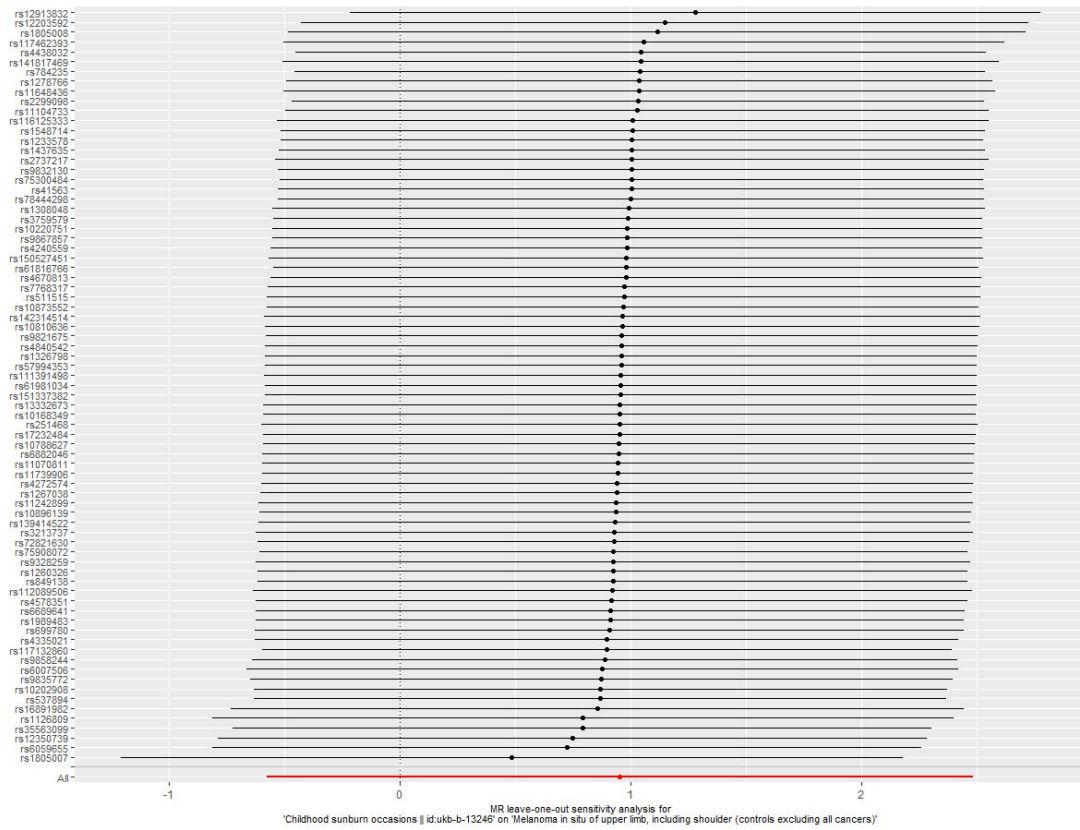
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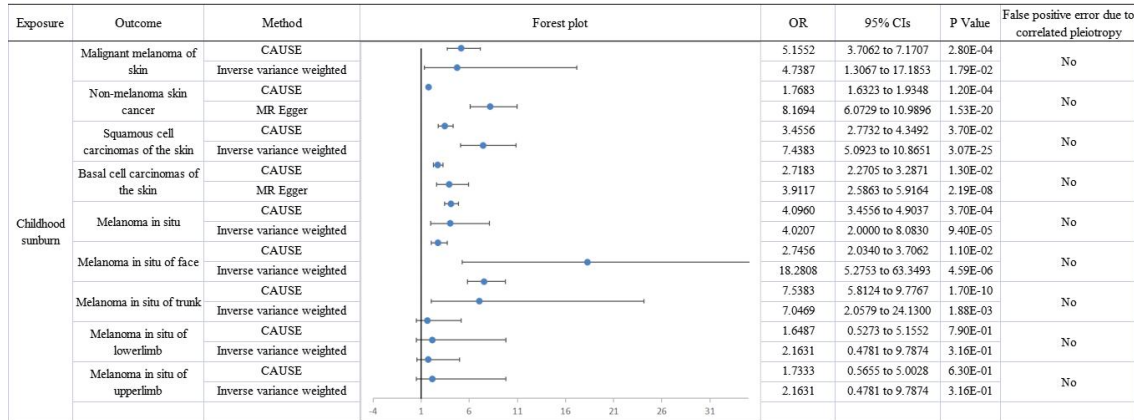
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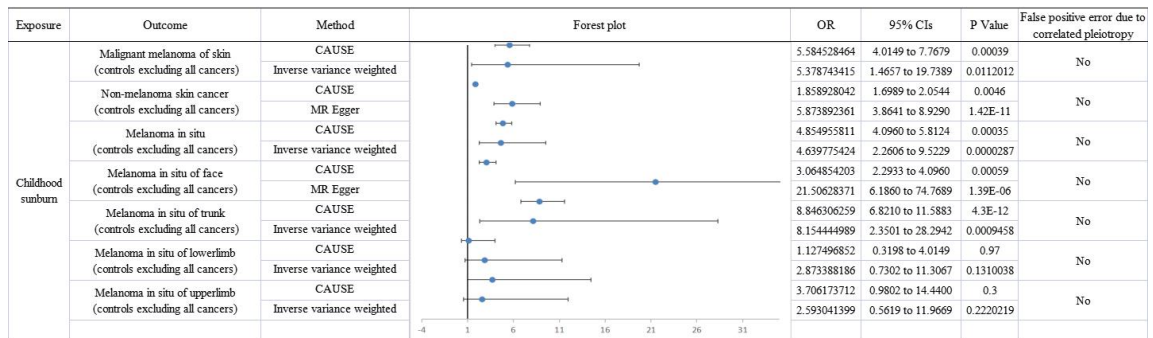
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Supplementary Figure 35. The forest plot of the replicate CAUSE method MR analysis (controls excluding all cancers). Causal estimates were given as beta and 95% confidence intervals (CIs).

Exposure	Mediator	Forest plots	OR	95% CIs	P-value	Proportion of mediation	Outcome
Childhood sunburn	Total effect		3.558	0.6260 to 13.6713	6.46E-02		
	Skin colour	Direct effect	4.635	0.3688 to 58.2590	2.35E-01	39.60%	
		Mediation effect	0.605	0.0344 to 10.6372	7.31E-01		
	Serum vitamin D levels	Direct effect	3.557	0.8915 to 14.1914	7.23E-02	18.02%	
		Mediation effect	0.796	0.1154 to 5.4835	8.16E-01		
	Body mass index	Direct effect	3.559	1.0256 to 12.3523	4.55E-02	19.87%	
		Mediation effect	0.777	0.1243 to 4.8591	7.87E-01		
	Alcohol intake	Direct effect	3.691	1.0339 to 13.1786	4.43E-02	15.66%	
		Mediation effect	0.820	0.1286 to 5.2259	8.33E-01		
	Smoking	Direct effect	3.434	0.9354 to 12.6100	6.30E-02	17.33%	
Mediation effect		0.803	0.1235 to 5.2164	8.18E-01			
Childhood sunburn	Total effect		4.893	3.5252 to 6.7914	2.26E-21		
	Skin colour	Direct effect	5.374	3.3235 to 8.6884	6.93E-12	12.72%	
		Mediation effect	0.817	0.4567 to 1.4618	4.96E-01		
	Serum vitamin D levels	Direct effect	4.892	3.7920 to 6.3102	2.43E-34	6.00%	
		Mediation effect	0.909	0.6002 to 1.3769	6.53E-01		
	Body mass index	Direct effect	4.893	4.0254 to 5.9486	3.42E-57	1.81%	
		Mediation effect	0.972	0.6634 to 1.4231	8.83E-01		
	Alcohol intake	Direct effect	4.879	3.8230 to 6.2262	3.61E-37	1.88%	
		Mediation effect	0.971	0.6450 to 1.4605	8.86E-01		
	Smoking	Direct effect	4.904	3.6611 to 6.5693	1.54E-26	1.11%	
Mediation effect		0.983	0.6333 to 1.5245	9.37E-01			
Childhood sunburn	Total effect		7.490	4.9176 to 11.4084	6.61E-21		
	Skin colour	Direct effect	10.955	5.8619 to 20.4716	6.22E-14	24.30%	
		Mediation effect	0.613	0.2885 to 1.3026	2.03E-01		
	Serum vitamin D levels	Direct effect	7.490	5.1618 to 10.8688	2.97E-26	3.95%	
		Mediation effect	1.083	0.6173 to 1.8990	7.82E-01		
	Body mass index	Direct effect	7.490	5.4791 to 10.2380	1.53E-36	6.55%	
		Mediation effect	1.141	0.6756 to 1.9273	6.22E-01		
	Alcohol intake	Direct effect	7.366	5.0437 to 10.7580	4.97E-25	2.30%	
		Mediation effect	1.047	0.5946 to 1.8449	8.73E-01		
	Smoking	Direct effect	7.477	5.0801 to 11.0054	1.95E-24	1.29%	
Mediation effect		1.026	0.5797 to 1.8174	9.29E-01			
Childhood sunburn	Total effect		4.313	3.2346 to 5.7522	2.43E-23		
	Skin colour	Direct effect	5.248	3.4408 to 8.0054	1.40E-14	18.89%	
		Mediation effect	0.759	0.4551 to 1.2647	2.90E-01		
	Serum vitamin D levels	Direct effect	4.312	3.4503 to 5.3900	9.43E-38	0.58%	
		Mediation effect	1.009	0.7008 to 1.4516	9.63E-01		
	Body mass index	Direct effect	4.314	3.6373 to 5.1158	5.84E-03	0.40%	
		Mediation effect	1.006	0.7198 to 1.4055	9.73E-01		
	Alcohol intake	Direct effect	4.292	3.4272 to 5.3740	6.37E-37	0.71%	
		Mediation effect	0.990	0.6869 to 1.4261	9.56E-01		
	Smoking	Direct effect	4.321	3.3236 to 5.6168	8.02E-28	1.70%	
Mediation effect		1.025	0.6945 to 1.5134	9.00E-01			
Childhood sunburn	Total effect		3.564	1.7412 to 7.2945	5.06E-04		
	Skin colour	Direct effect	4.511	1.1145 to 18.2538	3.47E-02	34.43%	
		Mediation effect	0.646	0.1342 to 3.1058	5.85E-01		
	Serum vitamin D levels	Direct effect	3.569	1.7732 to 7.1842	3.64E-04	16.15%	
		Mediation effect	0.814	0.2992 to 2.2164	6.88E-01		
	Body mass index	Direct effect	3.565	1.8576 to 6.8402	1.32E-04	6.34%	
		Mediation effect	0.923	0.3503 to 2.4297	8.70E-01		
	Alcohol intake	Direct effect	3.531	1.8307 to 6.8122	1.67E-04	11.97%	
		Mediation effect	0.859	0.3249 to 2.2701	7.59E-01		
	Smoking	Direct effect	3.582	1.7655 to 7.2689	4.08E-04	0.13%	
Mediation effect		1.002	0.3660 to 2.7416	9.97E-01			
Childhood sunburn	Total effect		16.905	4.6416 to 61.5694	1.80E-05		
	Skin colour	Direct effect	29.179	3.0350 to 280.5275	3.48E-03	17.50%	
		Mediation effect	0.610	0.0450 to 8.2604	7.10E-01		
	Serum vitamin D levels	Direct effect	16.959	4.6509 to 61.8367	1.80E-05	0.93%	
		Mediation effect	0.974	0.1565 to 6.0653	9.78E-01		
	Body mass index	Direct effect	16.909	5.2231 to 54.7382	2.38E-06	6.88%	
		Mediation effect	1.215	0.2118 to 6.9667	8.27E-01		
	Alcohol intake	Direct effect	17.184	5.2619 to 56.1200	2.48E-06	0.36%	
		Mediation effect	1.010	0.1751 to 5.8287	9.91E-01		
	Smoking	Direct effect	17.955	5.4674 to 58.9649	1.93E-06	2.04%	
Mediation effect		1.059	0.1829 to 6.1346	9.49E-01			
Childhood sunburn	Total effect		7.860	2.1599 to 28.6018	1.76E-03		
	Skin colour	Direct effect	20.201	2.0386 to 200.1828	1.02E-02	35.50%	
		Mediation effect	0.481	0.0346 to 6.6873	5.86E-01		
	Serum vitamin D levels	Direct effect	7.861	2.2396 to 27.5913	1.29E-03	7.22%	
		Mediation effect	1.161	0.1916 to 7.0307	8.71E-01		
	Body mass index	Direct effect	7.862	2.2194 to 27.8509	1.40E-03	31.62%	
		Mediation effect	1.919	0.3147 to 11.7009	4.80E-01		
	Alcohol intake	Direct effect	7.726	2.4602 to 24.2597	4.62E-04	8.59%	
		Mediation effect	1.194	0.2126 to 6.7043	8.41E-01		
	Smoking	Direct effect	8.115	2.2729 to 28.9748	1.26E-03	9.15%	
Mediation effect		1.208	0.1970 to 7.4046	8.38E-01			
Childhood sunburn	Total effect		2.111	0.5220 to 8.5382	2.95E-01		
	Skin colour	Direct effect	1.097	0.0800 to 15.0541	9.45E-01	54.66%	
		Mediation effect	1.504	0.0773 to 29.2786	7.87E-01		
	Serum vitamin D levels	Direct effect	2.112	0.4537 to 9.8329	3.41E-01	0.14%	
		Mediation effect	0.999	0.1251 to 7.9795	9.99E-01		
	Body mass index	Direct effect	2.111	0.5928 to 7.5204	2.49E-01	33.46%	
		Mediation effect	0.779	0.1178 to 5.1467	7.95E-01		
	Alcohol intake	Direct effect	2.007	0.5330 to 7.5571	3.03E-01	3.15%	
		Mediation effect	0.977	0.1423 to 6.7039	9.81E-01		
	Smoking	Direct effect	2.130	0.5761 to 7.8749	2.57E-01	6.72%	
Mediation effect		0.951	0.1403 to 6.4464	9.59E-01			
Childhood sunburn	Total effect		2.153	0.4670 to 9.9258	3.25E-01		
	Skin colour	Direct effect	3.282	0.2158 to 49.9005	3.92E-01	NA	
		Mediation effect	0.348	0.0153 to 7.8832	5.07E-01		
	Serum vitamin D levels	Direct effect	2.149	0.4173 to 11.0680	3.60E-01	39.54%	
		Mediation effect	0.738	0.0785 to 6.9431	7.91E-01		
	Body mass index	Direct effect	2.153	0.5052 to 9.1752	3.00E-01	2.79%	
		Mediation effect	1.022	0.1243 to 8.3965	9.84E-01		
	Alcohol intake	Direct effect	2.095	0.4895 to 8.9702	3.19E-01	14.18%	
		Mediation effect	0.897	0.1088 to 7.3950	9.20E-01		
	Smoking	Direct effect	2.080	0.4138 to 10.4592	3.74E-01	15.87%	
Mediation effect		1.129	0.1222 to 10.4351	9.15E-01			

Supplementary Figure 36. The forest plot of the mediation MR analyses. Causal estimates given as odds ratio (OR) and 95% confidence intervals (CIs) for the effect of childhood sunburn and skin carcinoma risk. Red:total effect; Green: effect of skin colour; Purple: effect of serum vitamin D levels; Blue: effect of body mass index; Orange: effect of alcohol intake; Black: effect of smoking; Brown: effect of hair colour; Grey: effect of facial ageing.

Exposure	Mediator		Forest plots	OR	95% CIs	P-value	Proportion of mediation	Outcomes
Childhood sunburn	Total effect			4.080	0.9629 to 15.8122	4.19E-02		Malignant melanoma of skin (controls excluding all cancers)
	Skin colour	Direct effect		5.348	0.4199 to 68.1256	1.96E-01	36.05%	
		Meditation effect		0.602	0.0337 to 10.7584	7.30E-01		
	Serum vitamin D levels	Direct effect		4.079	1.0126 to 16.4319	4.80E-02	15.14%	
		Meditation effect		0.808	0.1158 to 5.6427	8.30E-01		
	Body mass index	Direct effect		4.082	1.1621 to 14.3363	2.82E-02	16.77%	
		Meditation effect		0.790	0.1245 to 5.0114	8.02E-01		
	Alcohol intake	Direct effect		4.230	1.1715 to 15.2714	2.77E-02	13.64%	
		Meditation effect		0.825	0.1277 to 5.3365	8.40E-01		
	Smoking	Direct effect		3.943	1.0592 to 14.6752	4.08E-02	15.25%	
Meditation effect			0.807	0.1222 to 5.3284	8.24E-01			
Childhood sunburn	Total effect			4.919	3.5572 to 6.8016	5.74E-22		Non-melanoma skin cancer (controls excluding all cancers)
	Skin colour	Direct effect		5.396	3.3583 to 8.6695	3.23E-12	11.68%	
		Meditation effect		0.830	0.4675 to 1.4745	5.25E-01		
	Serum vitamin D levels	Direct effect		4.918	3.8048 to 6.3557	4.56E-34	4.44%	
		Meditation effect		0.932	0.6163 to 1.4087	7.37E-01		
	Body mass index	Direct effect		4.919	4.0368 to 5.9945	3.40E-56	0.38%	
		Meditation effect		0.994	0.6800 to 1.4529	9.75E-01		
	Alcohol intake	Direct effect		4.902	3.8330 to 6.2693	9.21E-37	1.29%	
		Meditation effect		0.980	0.6522 to 1.4716	9.21E-01		
	Smoking	Direct effect		4.934	3.6965 to 6.5864	2.42E-27	0.61%	
Meditation effect			0.990	0.6415 to 1.5286	9.65E-01			
Childhood sunburn	Total effect			4.153	1.9774 to 8.7216	1.69E-04		Melanoma in situ (controls excluding all cancers)
	Skin colour	Direct effect		5.239	1.2542 to 21.8827	2.32E-02	30.82%	
		Meditation effect		0.645	0.1288 to 3.2280	5.93E-01		
	Serum vitamin D levels	Direct effect		4.159	2.0354 to 8.4991	9.26E-05	14.15%	
		Meditation effect		0.818	0.2918 to 2.2904	7.01E-01		
	Body mass index	Direct effect		4.154	2.1499 to 8.0252	2.26E-05	4.84%	
		Meditation effect		0.933	0.3461 to 2.5174	8.92E-01		
	Alcohol intake	Direct effect		4.115	2.1061 to 8.0406	3.48E-05	10.09%	
		Meditation effect		0.866	0.3188 to 2.3538	7.78E-01		
	Smoking	Direct effect		4.177	2.0218 to 8.6308	1.13E-04	0.68%	
Meditation effect			1.010	0.3577 to 2.8509	9.85E-01			
Childhood sunburn	Total effect			20.120	5.4920 to 73.7080	5.87E-06		Melanoma in situ of face (controls excluding all cancers)
	Skin colour	Direct effect		33.949	3.5048 to 328.8392	2.35E-03	15.74%	
		Meditation effect		0.623	0.0456 to 8.5264	7.23E-01		
	Serum vitamin D levels	Direct effect		20.185	5.5051 to 74.0131	5.81E-06	0.65%	
		Meditation effect		0.981	0.1563 to 6.1561	9.83E-01		
	Body mass index	Direct effect		20.124	6.1802 to 65.5262	6.23E-07	6.61%	
		Meditation effect		1.219	0.2109 to 7.0516	8.25E-01		
	Alcohol intake	Direct effect		20.429	6.2771 to 66.4875	5.41E-07	0.69%	
		Meditation effect		1.021	0.1766 to 5.9019	9.82E-01		
	Smoking	Direct effect		21.401	6.5078 to 70.3804	4.56E-07	2.18%	
Meditation effect			1.068	0.1834 to 6.2146	9.42E-01			
Childhood sunburn	Total effect			9.225	2.4969 to 34.0815	8.61E-04		Melanoma in situ of trunk (controls excluding all cancers)
	Skin colour	Direct effect		24.097	2.2991 to 252.5625	7.94E-03	33.52%	
		Meditation effect		0.475	0.0323 to 6.9851	5.87E-01		
	Serum vitamin D levels	Direct effect		9.227	2.5665 to 33.1698	6.65E-04	7.33%	
		Meditation effect		1.177	0.1890 to 7.3291	8.61E-01		
	Body mass index	Direct effect		9.228	2.5461 to 33.4423	7.18E-04	30.48%	
		Meditation effect		1.968	0.3143 to 12.3268	4.69E-01		
	Alcohol intake	Direct effect		9.063	2.8042 to 29.2889	2.31E-04	8.57%	
		Meditation effect		1.210	0.2089 to 7.0039	8.32E-01		
	Smoking	Direct effect		9.533	2.5820 to 35.2000	7.16E-04	9.05%	
Meditation effect			1.223	0.1927 to 7.7584	8.31E-01			
Childhood sunburn	Total effect			2.405	0.5925 to 9.7641	2.20E-01		Melanoma in situ of lowerlimb (controls excluding all cancers)
	Skin colour	Direct effect		1.248	0.0898 to 17.3285	8.69E-01	44.87%	
		Meditation effect		1.483	0.0752 to 29.2142	7.96E-01		
	Serum vitamin D levels	Direct effect		2.407	0.5142 to 11.2634	2.65E-01	0.18%	
		Meditation effect		0.998	0.1242 to 8.0270	9.99E-01		
	Body mass index	Direct effect		2.406	0.6724 to 8.6064	1.77E-01	28.44%	
		Meditation effect		0.779	0.1172 to 5.1783	7.96E-01		
	Alcohol intake	Direct effect		2.288	0.6041 to 8.6657	2.23E-01	2.53%	
		Meditation effect		0.978	0.1415 to 6.7579	9.82E-01		
	Smoking	Direct effect		2.425	0.6486 to 9.0692	1.88E-01	5.42%	
Meditation effect			0.954	0.1392 to 6.5314	9.61E-01			
Childhood sunburn	Total effect			2.622	0.5565 to 12.3488	2.23E-01		Melanoma in situ of upperlimb (controls excluding all cancers)
	Skin colour	Direct effect		4.211	0.2674 to 66.2974	3.07E-01	NA	
		Meditation effect		0.319	0.0135 to 7.5476	4.79E-01		
	Serum vitamin D levels	Direct effect		2.617	0.4950 to 13.8334	2.58E-01	30.46%	
		Meditation effect		0.746	0.0767 to 7.2514	8.00E-01		
	Body mass index	Direct effect		2.622	0.6097 to 11.2711	1.95E-01	3.11%	
		Meditation effect		1.030	0.1227 to 8.6551	9.78E-01		
	Alcohol intake	Direct effect		2.549	0.5857 to 11.0947	2.12E-01	9.25%	
		Meditation effect		0.915	0.1080 to 7.7476	9.35E-01		
	Smoking	Direct effect		2.532	0.4963 to 12.9172	2.64E-01	13.34%	
Meditation effect			1.137	0.1200 to 10.7772	9.11E-01			

Supplementary Figure 37. The forest plot of the replicate mediation MR analyses (controls excluding all cancers). Causal estimates given as odds ratio (OR) and 95% confidence intervals (CIs) for the effect of childhood sunburn and skin carcinoma risk. Red:total effect; Green: effect of skin colour; Purple: effect of serum vitamin D levels; Blue: effect of body mass index; Orange: effect of alcohol intake; Black: effect of smoking; Brown: effect of hair colour; Grey: effect of facial ageing.