



Correction to “Impact of liquid sublingual immunotherapy on asthma onset and progression in patients with allergic rhinitis: a nationwide population-based study (EfficAPSI study)” [The Lancet Regional Health – Europe 41 (2024) 100915]

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The authors have noticed an error in the fourth sentence of the paragraph ‘Description of the population’ of the Results section where it should read “They had a lower mean number of AH or INCS dispensed, but a similar mean number of AH and INCS dispensed together.” instead of “They had a lower mean number of AH or INCS dispensed, but a higher mean number of AH and INCS dispensed together.”

The authors have also noticed an error in the sixth sentence of the paragraph ‘Overall population: association between new asthma events and SLIT exposure’ of the Results section where it should read “Appendix Results S4 and Results S8” instead of “Appendix Results S8 and Results S9”.

Furthermore, the authors have noticed an error in the second sentence of the paragraph ‘Population without asthma at index date: prevention of asthma onset’ of the Results section where it should read “The associations were consistent across age, sex and allergen groups, with notably a one-third reduction in patients aged 5–24 years old (combined definition: 0.67 [0.62–0.71]) and a 40% reduction for HDM and grass (combined definition: 0.59 [0.57–0.62] and 0.52 [0.49–0.56], respectively; Figure 2 and Appendix Results S5, Results S8 and Results S9).” instead of “The associations were consistent across age, sex and allergen groups, with notably a one-third reduction in patients aged 5–24 years old (combined definition: 0.67 [0.62–0.71]) and a 40% reduction for HDM and grass (combined definition: 0.58 [0.55–0.61] and 0.52 [0.49–0.56], respectively; Figure 2 and Appendix Results S5, Results S8 and Results S9).” This error is linked to a rounding error made in the Supplementary Material: Appendix Results S5 for the adjusted HR corresponding to HDM allergens with the combined definition.

The corrected table [Appendix Results S5](#) can be found below.

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	SLIT Exposed			Controls			Crude incidence rate ratio [95% CI]	Adjusted HR [95% CI]
	Person-years	n events/n patients	Incidence (%P-Y)	Person-years	n events/n patients	Incidence (%P-Y)		
Sensitive definition								
Sex								
Female	199,127	19,946/42,478	10.02	648,547	82,407/141,814	12.71	0.79 [0.78–0.8]	0.79 [0.78–0.80]
Male	182,988	13,223/35,419	7.23	457,822	48,307/93,733	10.55	0.68 [0.67–0.7]	0.73 [0.72–0.75]
Age								
[5–24] years	36,213	2999/7358	8.28	282,089	30,247/59,835	10.72	0.77 [0.74–0.80]	0.73 [0.71–0.75]
[25–39] years	172,660	15,721/35,696	9.11	259,709	31,272/55,132	12.04	0.76 [0.74–0.77]	0.84 [0.82–0.86]
[40–49] years	128,586	10,241/25,453	7.96	190,060	22,888/40,038	12.04	0.66 [0.65–0.68]	0.75 [0.73–0.78]
≥50 years	44,655	4208/9390	9.42	374,511	46,307/80,542	12.36	0.76 [0.74–0.79]	0.73 [0.71–0.74]
Allergen composition								
HDM	124,248	10,997/25,617	8.85	–	130,714/235,547	–	–	0.73 [0.72–0.75]
Grasses	61,428	4586/11,708	7.47	–	130,714/235,547	–	–	0.65 [0.63–0.67]
Birch	8230	717/1744	8.71	–	130,714/235,547	–	–	0.67 [0.63–0.72]
Ragweed	5286	394/1023	7.45	–	130,714/235,547	–	–	0.59 [0.53–0.65]
Cat	4419	469/969	10.61	–	130,714/235,547	–	–	0.82 [0.76–0.89]
Alternaria	1940	178/402	9.17	–	130,714/235,547	–	–	0.99 [0.87–1.13]
Specific definition								
Sex								
Female	292,544	324/42,478	0.11	1,094,547	2328/141,814	0.21	0.52 [0.46–0.58]	0.63 [0.57–0.69]
Male	243,144	202/35,419	0.08	717,143	1122/93,733	0.16	0.53 [0.46–0.62]	0.75 [0.65–0.86]
Age								
[5–24] years ^a	50,486	58/7358	0.11	444,502	715/59,835	0.16	0.71 [0.55–0.93]	0.95 [0.80–1.13]
[25–39] years	246,229	241/35,696	0.10	428,381	650/55,132	0.15	0.65 [0.56–0.75]	0.63 [0.54–0.75]
[40–49] years	174,955	140/25,453	0.08	316,171	531/40,038	0.17	0.48 [0.40–0.57]	0.53 [0.43–0.66]
≥50 years ^a	64,016	87/9390	0.14	622,636	1554/80,542	0.25	0.54 [0.44–0.68]	0.66 [0.57–0.75]
Allergen composition								
HDM	174,269	172/25,617	0.10	–	3450/235,547	–	–	0.71 [0.63–0.81]
Grasses ^a	82,841	54/11,708	0.07	–	3450/235,547	–	–	0.40 [0.32–0.52]
Birch ^a	11,568	12/1744	0.10	–	3450/235,547	–	–	0.96 [0.65–1.42]
Ragweed ^a	7030	<11/1023	–	–	3450/235,547	–	–	0.97 [0.56–1.70]
Cat ^a	6591	<11/969	–	–	3450/235,547	–	–	1.60 [1.14–2.25]
Alternaria ^a	2819	0/402	–	–	3450/235,547	–	–	NC [NC–NC]
Combined definition								
Sex								
Female	280,820	3006/42,478	1.07	1,001,054	20,338/141,814	2.03	0.53 [0.51–0.55]	0.62 [0.60–0.65]
Male	235,661	1909/35,419	0.81	664,021	11,525/93,733	1.74	0.47 [0.44–0.49]	0.60 [0.57–0.63]
Age								
[5–24] years	48,799	455/7358	0.93	417,045	5905/59,835	1.42	0.66 [0.60–0.72]	0.67 [0.62–0.71]
[25–39] years	237,652	2184/35,696	0.92	399,846	6290/55,132	1.57	0.58 [0.56–0.61]	0.69 [0.65–0.73]
[40–49] years	169,356	1424/25,453	0.84	290,966	5424/40,038	1.86	0.45 [0.43–0.48]	0.54 [0.51–0.58]
≥50 years	60,674	852/9390	1.40	557,217	14,244/80,542	2.56	0.55 [0.51–0.59]	0.58 [0.55–0.61]
Allergen composition								
HDM	167,732	1663/25,617	0.99	–	31,863/235,547	–	–	0.59 [0.57–0.62]
Grasses	80,570	596/11,708	0.74	–	31,863/235,547	–	–	0.52 [0.49–0.56]
Birch ^a	11,217	98/1744	0.87	–	31,863/235,547	–	–	0.57 [0.49–0.66]
Ragweed ^a	6873	43/1023	0.63	–	31,863/235,547	–	–	0.43 [0.33–0.55]
Cat ^a	6244	100/969	1.60	–	31,863/235,547	–	–	0.93 [0.80–1.08]
Alternaria ^a	2676	28/402	1.05	–	31,863/235,547	–	–	0.55 [0.41–0.76]

CI: confidence interval; HDM: house dust mite; HR: hazard ratio; SLIT: sublingual immunotherapy; NC: no calculated. ^aResults lacking statistical power should be interpreted with caution.

Results S5: Associations between exposure to SLIT-liquid and asthma events, stratification on the no pre-existing asthma subpopulation.

The authors have also noticed an error in the fourth sentence of the paragraph ‘Population with asthma at index date: prevention of asthma worsening–time-to-first asthma treatment step-up’ of the Results section where it should read “In patients treated with SLIT-liquid, the exposure to SLIT was associated with about 50% of stepping down asthma treatment across the nine years of follow-up (first year OR [95% CI] for baseline step 2: 1.53 [1.42–1.65], baseline step 3/4: 1.45 [1.39–1.51], and baseline step 5: 1.52 [1.35–1.71], Appendix Results S10).” instead of “In patients treated with SLIT-liquid, the exposure to SLIT was associated with about 50% of stepping down asthma treatment across the nine years of follow-up (first year OR [95% CI] for baseline step 2: 1.53 [1.42–1.65], baseline step 3: 1.45 [1.39–1.51], and baseline step 4: 1.52 [1.35–1.71], Appendix Results S10).”

The authors have noticed an error in the Supplementary Material: Appendix Results S7, in the part corresponding to allergen composition where the number of events/number of control patients receiving GINA treatment step 1 was mistakenly carried over to step 2 and step 3/4 instead of the correct figures for these steps. Since this error is confined solely to the aggregated values presented in that Table while correct figures were considered for the analysis models, it does not affect any interpretations and conclusions in the article.

The corrected table [Appendix Results S7](#) can be found below.

	SLIT Exposed			Controls			Crude incidence rate ratio [95% CI]	Adjusted HR [95% CI]
	Person-years	n events/n patients	Incidence (%P-Y)	Person-years	n events/n patients	Incidence (%P-Y)		
Sex								
Female								
Step 1 baseline	30,081	4194/7353	13.94	84,410	15,727/22,516	18.63	0.75 [0.72–0.77]	0.71 [0.67–0.76]
Step 2 baseline	11,535	1662/2840	14.41	25,349	4509/6550	17.79	0.81 [0.77–0.86]	0.75 [0.68–0.83]
Steps 3/4 baseline	55,068	1370/8878	2.49	178,117	5566/26,295	3.12	0.80 [0.75–0.84]	0.74 [0.67–0.83]
Male								
Step 1 baseline	22,829	2804/5328	12.28	58,381	9145/14,349	15.66	0.78 [0.75–0.82]	0.73 [0.68–0.79]
Step 2 baseline	7952	923/1803	11.61	22,375	3155/5210	14.10	0.82 [0.76–0.89]	0.70 [0.61–0.80]
Steps 3/4 baseline	37,508	731/5946	1.95	117,656	3362/17,396	2.86	0.68 [0.63–0.74]	0.65 [0.55–0.76]
Age								
[5–24] years								
Step 1 baseline	6788	756/1539	11.14	49,317	7347/12,075	14.90	0.75 [0.69–0.81]	0.80 [0.72–0.89]
Step 2 baseline	2751	301/609	10.94	23,663	3258/5546	13.77	0.79 [0.71–0.89]	0.79 [0.66–0.94]
Steps 3/4 baseline	9972	211/1587	2.12	89,771	2697/13,598	3.00	0.70 [0.61–0.81]	0.72 [0.58–0.90]
[25–39] years								
Step 1 baseline	27,306	3606/6549	13.21	34,406	6063/8825	17.62	0.75 [0.72–0.78]	0.76 [0.71–0.81]
Step 2 baseline	10,093	1348/2392	13.36	8485	1439/2118	16.96	0.79 [0.73–0.85]	0.83 [0.73–0.94]
Steps 3/4 baseline	47,054	992/7477	2.11	66,589	1864/9626	2.80	0.75 [0.70–0.81]	0.72 [0.62–0.83]
[40–49] years								
Step 1 baseline	13,818	1884/3341	13.63	23,650	4371/6194	18.48	0.74 [0.70–0.78]	0.70 [0.64–0.77]
Step 2 baseline	4681	637/1138	13.61	6030	1011/1463	16.77	0.81 [0.73–0.90]	0.68 [0.58–0.81]
Steps 3/4 baseline	24,164	567/3884	2.35	51,134	1493/7335	2.92	0.80 [0.73–0.89]	0.64 [0.55–0.75]
≥50 years								
Step 1 baseline	4998	752/1252	15.05	35,419	7091/9771	20.02	0.75 [0.70–0.81]	0.63 [0.56–0.70]
Step 2 baseline	1962	299/504	15.24	9546	1956/2633	20.49	0.74 [0.66–0.84]	0.64 [0.53–0.76]
Steps 3/4 baseline	11,386	331/1876	2.91	88,280	2874/13,132	3.26	0.89 [0.80–1.00]	0.72 [0.61–0.86]
Allergen composition								
HDM								
Step 1 baseline	16,185	2171/3904	13.41	–	24,872/36,865	–	–	0.71 [0.65–0.77]
Step 2 baseline	6216	884/1544	14.22	–	7664/11,760	–	–	0.76 [0.64–0.90]
Steps 3/4 baseline	29,746	737/4848	2.48	–	8928/43,691	–	–	0.78 [0.66–0.92]
Grasses								
Step 1 baseline	7488	908/1693	12.13	–	24,872/36,865	–	–	0.64 [0.56–0.72]
Step 2 baseline	2344	277/517	11.82	–	7664/11,760	–	–	0.81 [0.66–0.99]
Steps 3/4 baseline	10,882	205/1660	1.88	–	8928/43,691	–	–	0.67 [0.51–0.88]

(Results S7 continues on next page)

	SLIT Exposed			Controls			Crude incidence rate ratio [95% CI]	Adjusted HR [95% CI]
	Person-years	n events/n patients	Incidence (%P-Y)	Person-years	n events/n patients	Incidence (%P-Y)		
(Continued from previous page)								
Birch								
Step 1 baseline	1671	232/410	13.89	-	24,872/36,865	-	-	0.67 [0.53-0.85]
Step 2 baseline ^a	625	69/144	11.04	-	7664/11,760	-	-	1.01 [0.66-1.54]
Steps 3/4 baseline ^a	2993	51/480	1.70	-	8928/43,691	-	-	0.59 [0.34-1.03]
Ragweed								
Step 1 baseline ^a	719	72/151	10.01	-	24,872/36,865	-	-	0.74 [0.55-0.99]
Step 2 baseline ^a	287	23/54	8.02	-	7664/11,760	-	-	0.39 [0.21-0.71]
Steps 3/4 baseline ^a	1016	12/155	1.18	-	8928/43,691	-	-	0.60 [0.19-1.91]
Cat								
Step 1 baseline	1250	183/318	14.64	-	24,872/36,865	-	-	0.65 [0.46-0.92]
Step 2 baseline ^a	519	81/130	15.60	-	7664/11,760	-	-	0.86 [0.51-1.45]
Steps 3/4 baseline ^a	2517	68/415	2.70	-	8928/43,691	-	-	1.32 [0.76-2.31]
Alternaria								
Step 1 baseline ^a	188	28/48	14.89	-	24,872/36,865	-	-	0.71 [0.26-1.95]
Step 2 baseline ^a	98	11/20	11.17	-	7664/11,760	-	-	0.61 [0.25-1.50]
Steps 3/4 baseline ^a	456	<11/72	-	-	8928/43,691	-	-	1.00 [0.32-3.19]

CI: confidence interval; HDM: house dust mite; HR: hazard ratio; SLIT: sublingual immunotherapy. ^aResults lacking statistical power should be interpreted with caution.

Results S7: Associations between exposure to SLIT-liquid and GINA treatment step-up, stratification on the pre-existing asthma subpopulation.

The authors have noticed an error in the Supplementary Material: Appendix Results S6, in the part corresponding to the combined definition results where the rows for 3 allergens (birch, ragweed and cat) were swapped by mistake. Overall, the interpretation of the models was not impacted as the hazard ratios are going in the same direction. However, the strength of the association and the number of events are modified.

The corrected table [Appendix Results S6](#) can be found below.

	SLIT Exposed			Controls			Crude incidence rate ratio [95% CI]	Adjusted HR [95% CI]
	Person-years	n events/n patients	Incidence (%P-Y)	Person-years	n events/n patients	Incidence (%P-Y)		
Sensitive definition								
Sex								
Female	38,242	17,734/20,564	46.37	93,835	53,173/58,423	56.67	0.82 [0.80-0.83]	0.72 [0.71-0.74]
Male	28,442	11,676/14,031	41.05	62,555	35,157/39,112	56.20	0.73 [0.72-0.75]	0.69 [0.67-0.70]
Age								
[5-24] years	7898	3441/4077	43.57	52,381	29,383/33,002	56.09	0.78 [0.75-0.80]	0.66 [0.64-0.68]
[25-39] years	33,314	15,110/17,653	45.36	35,175	19,914/21,772	56.61	0.80 [0.78-0.82]	0.78 [0.76-0.80]
[40-49] years	18,461	7477/8964	40.50	25,728	14,483/15,825	56.29	0.72 [0.70-0.74]	0.71 [0.68-0.73]
≥50 years	7011	3382/3901	48.24	43,106	24,550/26,936	56.95	0.85 [0.82-0.88]	0.73 [0.71-0.75]
Allergen composition								
HDM	21,353	9459/11,148	44.30	-	88,330/97,535	-	-	0.67 [0.65-0.68]
Grasses	8964	3398/4089	37.91	-	88,330/97,535	-	-	0.61 [0.59-0.63]
Birch	2018	949/1096	47.02	-	88,330/97,535	-	-	0.59 [0.56-0.64]
Ragweed	807	323/385	40.02	-	88,330/97,535	-	-	0.62 [0.56-0.68]
Cat	1337	839/933	62.75	-	88,330/97,535	-	-	0.64 [0.59-0.69]
Alternaria	320	129/155	40.28	-	88,330/97,535	-	-	0.65 [0.54-0.78]
Specific definition								
Sex								
Female	137,126	1139/20,564	0.83	433,713	5695/58,423	1.31	0.63 [0.59-0.67]	0.62 [0.59-0.66]
Male	94,207	455/14,031	0.48	291,671	2630/39,112	0.90	0.54 [0.48-0.59]	0.59 [0.54-0.65]

(Results S6 continues on next page)

	SLIT Exposed			Controls			Crude incidence rate ratio [95% CI]	Adjusted HR [95% CI]
	Person-years	n events/n patients	Incidence (%P-Y)	Person-years	n events/n patients	Incidence (%P-Y)		
(Continued from previous page)								
Age								
[5-24] years	27,302	182/4077	0.67	242,093	2141/33,002	0.88	0.75 [0.65-0.88]	0.75 [0.68-0.84]
[25-39] years	118,405	806/17,653	0.68	164,451	1755/21,772	1.07	0.64 [0.59-0.69]	0.56 [0.51-0.62]
[40-49] years	59,886	390/8964	0.65	120,972	1300/15,825	1.07	0.61 [0.54-0.68]	0.64 [0.56-0.72]
≥50 years	25,739	216/3901	0.84	197,868	3129/26,936	1.58	0.53 [0.46-0.61]	0.59 [0.54-0.65]
Allergen composition								
HDM	73,516	574/11,148	0.78	-	8325/97,535	-	-	0.70 [0.64-0.75]
Grasses	28,320	160/4089	0.56	-	8325/97,535	-	-	0.54 [0.47-0.61]
Birch ^a	7248	37/1096	0.51	-	8325/97,535	-	-	0.40 [0.29-0.56]
Ragweed ^a	2580	13/385	0.50	-	8325/97,535	-	-	0.19 [0.09-0.40]
Cat ^a	6145	56/933	0.91	-	8325/97,535	-	-	0.83 [0.64-1.07]
Alternaria ^a	1033	<11/155	-	-	8325/97,535	-	-	1.43 [0.92-2.23]
Combined definition								
Sex								
Female	104,764	7010/20,564	6.69	289,729	27,691/58,423	9.56	0.70 [0.68-0.72]	0.64 [0.62-0.65]
Male	72,642	4444/14,031	6.12	193,889	17,647/39,112	9.10	0.67 [0.65-0.69]	0.60 [0.58-0.62]
Age								
[5-24] years	21,774	1151/4077	5.29	167,546	13,499/33,002	8.06	0.66 [0.62-0.70]	0.56 [0.53-0.58]
[25-39] years	91,423	5737/17,653	6.28	113,920	9674/21,772	8.49	0.74 [0.72-0.76]	0.67 [0.65-0.70]
[40-49] years	46,047	2946/8964	6.40	80,455	7527/15,825	9.36	0.68 [0.66-0.71]	0.63 [0.60-0.66]
≥50 years	18,162	1620/3901	8.92	121,696	14,638/26,936	12.03	0.74 [0.70-0.78]	0.65 [0.63-0.68]
Allergen composition								
HDM	54,295	4045/11,148	7.45	-	45,338/97,535	-	-	0.63 [0.61-0.66]
Grasses	23,078	1151/4089	4.99	-	45,338/97,535	-	-	0.58 [0.55-0.61]
Birch	5907	302/1096	5.11	-	45,338/97,535	-	-	0.34 [0.30-0.39]
Ragweed	2173	101/385	4.65	-	45,338/97,535	-	-	0.58 [0.49-0.68]
Cat	4138	401/933	9.69	-	45,338/97,535	-	-	0.79 [0.71-0.89]
Alternaria ^a	794	49/155	6.17	-	45,338/97,535	-	-	0.88 [0.68-1.13]
CI: confidence interval; HDM: house dust mite; HR: hazard ratio; SLIT: sublingual immunotherapy. ^a Results lacking statistical power should be interpreted with caution.								
Results S6: Associations between exposure to SLIT-liquid and asthma events, stratification on the pre-existing asthma subpopulation.								

If you have any further questions or comments, we will of course be happy to address them. The authors would like to apologise for any inconvenience caused.