# SUPPLEMENTARY MATERIAL

Legend to Figures

Figure 1. Daily absolute pollen concentrations (A) and cumulative pollen concentrations (B) of Cupressaceae, Fagales, Oleaceae, Poaceae, Urticaceae, *Ambrosia* spp*.,* and *Artemisia* spp. in Rome, 2018. Blue areas indicate linearly interpolated data for missing values.

CUP Cupressaceae

FAG Fagales

OLE Oleaceae

POA Poaceae

URT Urticaceae

AMB Ambrosia spp.

ART Artemisia spp.
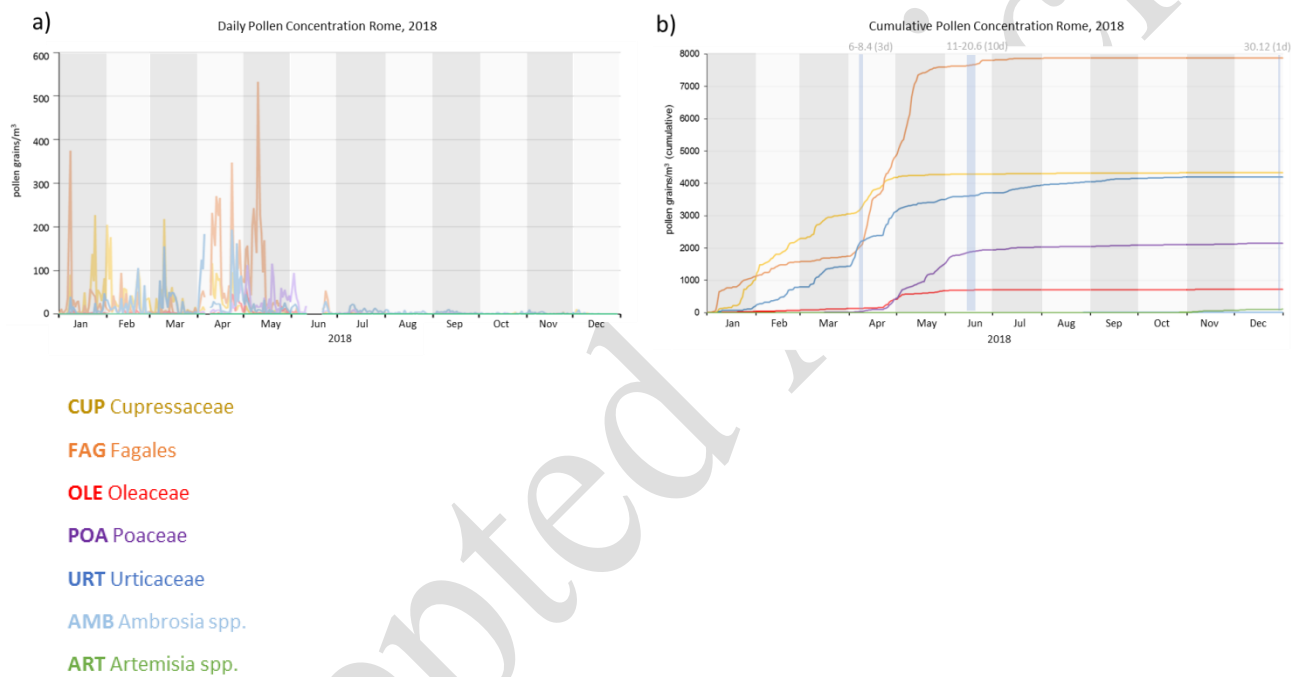
Figure 2. Number (n) of physicians using the curves of daily absolute or cumulative pollen concentrations to identify (A) the highest peak of daily pollen count and (B) the cumulative pollen counts in 2018, by center.
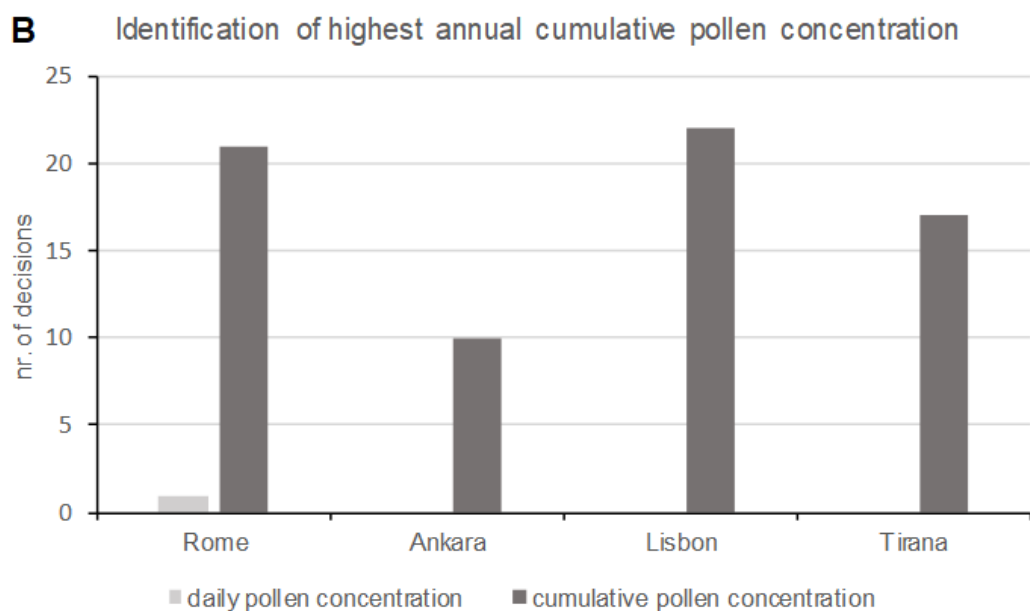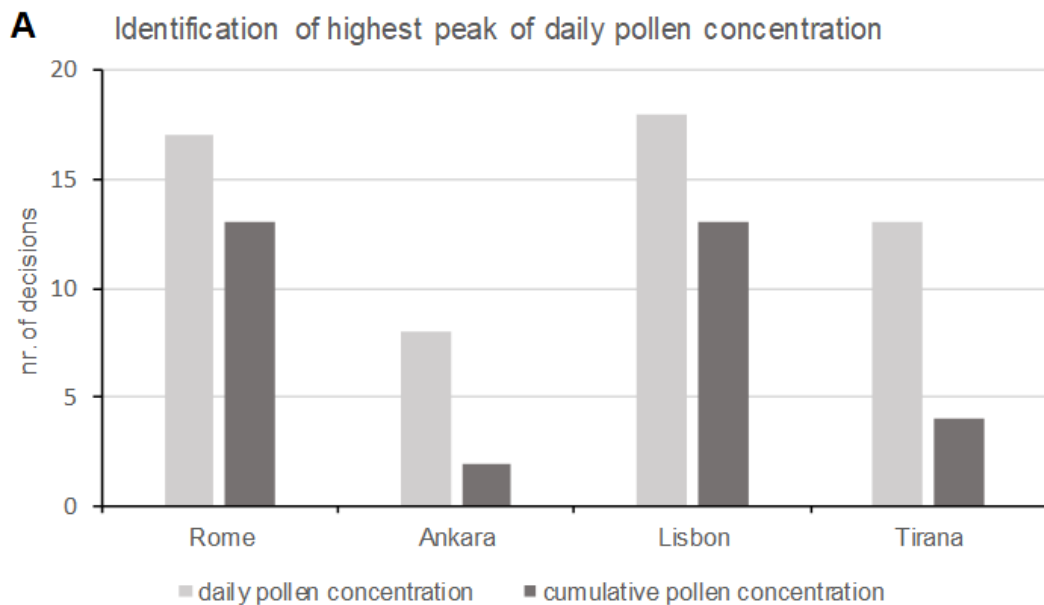
Table e1 - Characteristics of aerobiological monitoring in six different centers in four countries.*

Centers	Climate		Aerobiologists			Pollen Traps			Missing days	
	mean temp (°C)	annual rainfall (mm)	affiliation	experience (y)^	types of pollens detected (n)	pollen trap	altitude (m)	coordinates	n	longest period (n)#
Istanbul Turkey	15.6	803	Ankara University	29-8	> 50	Burkard	73	41°01'26.11" N 28°55'02.34" E	0	0
Izmir Turkey	19.6	565	Ege University	13	> 50	Lanzoni	27	38°27'32.9" N 270°13'18.6" E	0	0
Marseille France	15.5	515	R.N.S.A.	29	> 75	Lanzoni	28	43°17'12.48" N 05°22'44.76"E	29	7
Messina Italy	18.1	547	ARPACal	5	44	Burkard	85	38°10'8.375" N 15°40'5.25" E	8	4
Rome Italy	16.6	1007	R.I.M.A.-A.I.A.	21	70	Lanzoni	80	41°51'16" N 12°36'19" E	14	10
Valencia Spain	18.2	475	University of Oviedo	21	50	Burkard	50	39°28´44" N 0°21´42" W	4	1

* pollen counts collected from 01.01 to 31.12 2018 (365 days); all readings were done with a continuos stripe, field diameter 0.5mm, magnification 400x

^ aerobiological and pollen monitoring experience of the correspondent aerobiologist (years)

§ number of tape-stripes changed per month; # number of consecutive missing days

Table e2 - Cumulative and peak pollen concentration (pollen grains/m^3) in six Southern European cities during 2018.

Pollen	Valencia		Marseille		Rome		Messina		Istanbul		Izmir	
	peak	cum*	peak	cum*	peak	cum*	peak	cum*	peak	cum*	peak	cum*
Cupressaceae	720	7622	3444	20590	226	4331	134	1723	618	3341	6830	38755
Fagales	42	161	679	3951	531	7880	81	331	12	160	17	158
Oleaceae	174	1657	168	2846	78	721	67	899	25	219	237	7262
Poaceae	53	797	113	1755	115	2147	20	775	12	340	167	8257
Urticaceae	45	1296	121	3419	193	4197	634	21867	23	377	14	1026
Ambrosia spp.	0	0	105	650	1	11	1	4	147	859	0	0
Artemisia spp.	5	68	57	229	2	112	14	97	8	82	4	152

* *cumulative pollen concentration (pollen grains/m^3) from 1st January to 31st December, 2018.*

Table e3. - Characteristics of the doctors participating in the survey, by center.

	Rome n=26		Ankara n=25		Tirana n=34		Lisbon n=27		all centers n=112	
Male gender (n;%)	9	*34,6*	6	*24,0*	2	*5,9*	5	*18,5*	22	*20,5*
Age (years) (median, IQR)	47	*28-74*	33	*26-48*	36	*28-71*	32	*27-64*	34	*26-74*
with specialization (n;%)	17	*65,4*	24	*96,0*	21	*61,8*	15	*55,6*	77	*68,8*
allergology	14	*53,8*	15	*60,0*	21	*61,8*	15	*55,6*	65	*58,0*
others	17	*65,4*	20	*80,0*	8	*23,5*	2	*7,4*	47	*42,0*
work environment (n;%)										
hospital	18	*69,2*	25	*100,0*	22	*64,7*	24	*88,9*	89	*79,5*
private practice	8	*30,8*	0	*0,0*	7	*20,6*	10	*37,0*	25	*22,3*
other	4	*15,4*	0	*0,0*	8	*23,5*	2	*7,4*	14	*12,5*
clinical experience (years) (n;%)										
< 6	10	*38,5*	8	*32,0*	13	*38,2*	9	*33,3*	40	*35,7*
6-10	4	*15,4*	8	*32,0*	5	*14,7*	7	*25,9*	24	*21,4*
≥ 11	11	*42,3*	9	*36,0*	16	*47,1*	10	*37,0*	46	*41,1*
use of pollen calendar* (n;%)	16	*61,5*	12	*48,0*	7	*20,6*	19	*70,4*	54	*48,2*
use of pollen curves* (n;%)	9	*34,6*	9	*36,0*	6	*17,6*	7	*25,9*	31	*27,7*

* ever used pollen calendars or pollen curves for allergic rhinitis diagnosis

Table e4. Quality of the participants´ answers and perceived clinical relevance (daily absolute vs cumulative curves)

	Rome n=26		Ankara n=25		Tirana n=34		Lisbon n=27		all centers	
appropriate interpretation (n;%)										
daily absolute curves	20	*76.9*	23	*92.0*	32	*94.1*	19	*70.4*	94	*83.9*
cumulative curves	23	*88.5*	16	*64.0*	31	*91.2*	20	*74.1*	90	*80.4*
both	19	*73.1*	16	*64.0*	29	*85.3*	16	*59.3*	80	*71.4*
perceived usefulness for clinical decisions (ı										
daily absolute curves	4	*15.4*	3	*12.0*	12	*35.3*	9	*33.3*	28	*25.0*
cumulative curves	1	*3.8*	1	*4.0*	2	*5.9*	0	*0.0*	4	*3.6*
both	21	*80.8*	21	*84.0*	20	*58.8*	18	*66.7*	80	*71.4*