

## **SUPPLEMENTARY MATERIAL**

### **Epidemiology and Economic Burden of Atopic Dermatitis: Real-World Retrospective Data from a Large Nationwide Israeli Healthcare Provider Database**

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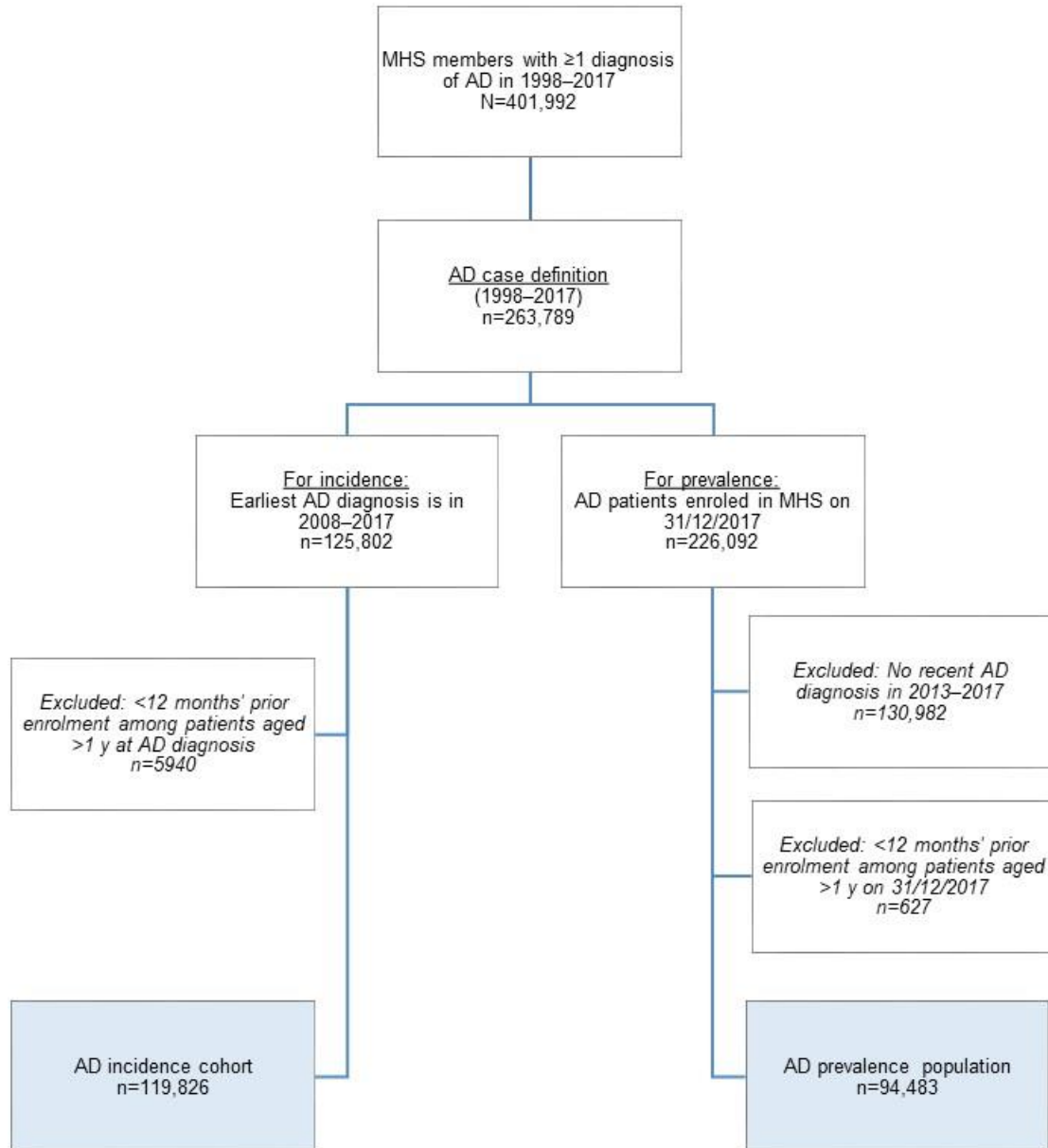
**Table S1.** Treatment patterns in patients with atopic dermatitis stratified by age and AD severity

Dispensed in 2013–2017, after first AD diagnosis		Age <6 mo			Age 6 mo–<12 y			Age 12– <18 y			Age ≥18 y			Total		
		Mild	Moderate	Severe	Mild	Moderate	Severe	Mild	Moderate	Severe	Mild	Moderate	Severe	Mild	Moderate	Severe
n		177	16	0	32740	14,704	2208	7724	4817	400	13,884	14,680	3133	54,525	34,217	5741
TCS, %																
Low potency	≥1	39.0	43.8	0.0	50.2	63.1	76.6	40.5	51.8	60.8	36.3	54.8	67.2	45.2	57.9	70.4
	≥2	8.5	18.8	0.0	21.6	35.5	52.1	14.8	25.3	34.3	14.1	30.6	44.1	18.7	32.0	46.5
Mid potency	≥1	18.1	56.3	0.0	23.9	74.5	81.3	23.0	69.6	75.8	20.4	64.9	72.7	22.9	69.7	76.2
	≥2		<b>31.3</b>	0.0		<b>44.7</b>	55.7		<b>38.7</b>	50.3		<b>36.8</b>	48.3		<b>40.5</b>	51.3
High potency	≥1	22.0	50.0	0.0	25.5	74.9	74.6	32.3	82.9	83.0	43.3	90.2	91.7	31.0	82.6	84.5
	≥2		<b>31.3</b>	0.0		<b>45.3</b>	47.7		<b>56.4</b>	64.5		<b>71.0</b>	77.8		<b>57.9</b>	65.3
TCI, %	≥1	6.2	31.3	0.0	6.7	18.7	25.4	5.9	18.2	30.8	7.0	16.6	19.9	6.7	17.7	22.8
	≥2		<b>18.8</b>	0.0		<b>9.0</b>	12.6		<b>8.2</b>	18.5		<b>7.3</b>	10.4		<b>8.2</b>	11.8
Phototherapy, %	≥1		<b>0.0</b>	0.0		<b>0.6</b>	1.1		<b>2.2</b>	6.0		<b>5.2</b>	10.8		<b>2.8</b>	6.8
SI, %																
AZA	≥1			<b>0.0</b>			<b>0.2</b>			<b>5.3</b>			<b>3.9</b>			<b>2.6</b>
CsA	≥1			<b>0.0</b>			<b>0.5</b>			<b>3.0</b>			<b>2.5</b>			<b>1.7</b>
MTX	≥1			<b>0.0</b>			<b>1.3</b>			<b>9.3</b>			<b>9.7</b>			<b>6.4</b>
MM	≥1			<b>0.0</b>			<b>0.2</b>			<b>0.5</b>			<b>1.4</b>			<b>0.9</b>
SC, %	≥1	2.8	0.0	0.0	18.8	17.5	99.5	9.9	11.1	92.3	14.9	18.6	94.7	16.5	17.1	96.3
	≥2	0.0		0.0	7.3		99.1	3.3		91.5	5.2		92.5	6.2		95.0
With moderate AD criteria	≥2			<b>0.0</b>			<b>98.6</b>			<b>88.8</b>			<b>90.6</b>			<b>93.5</b>

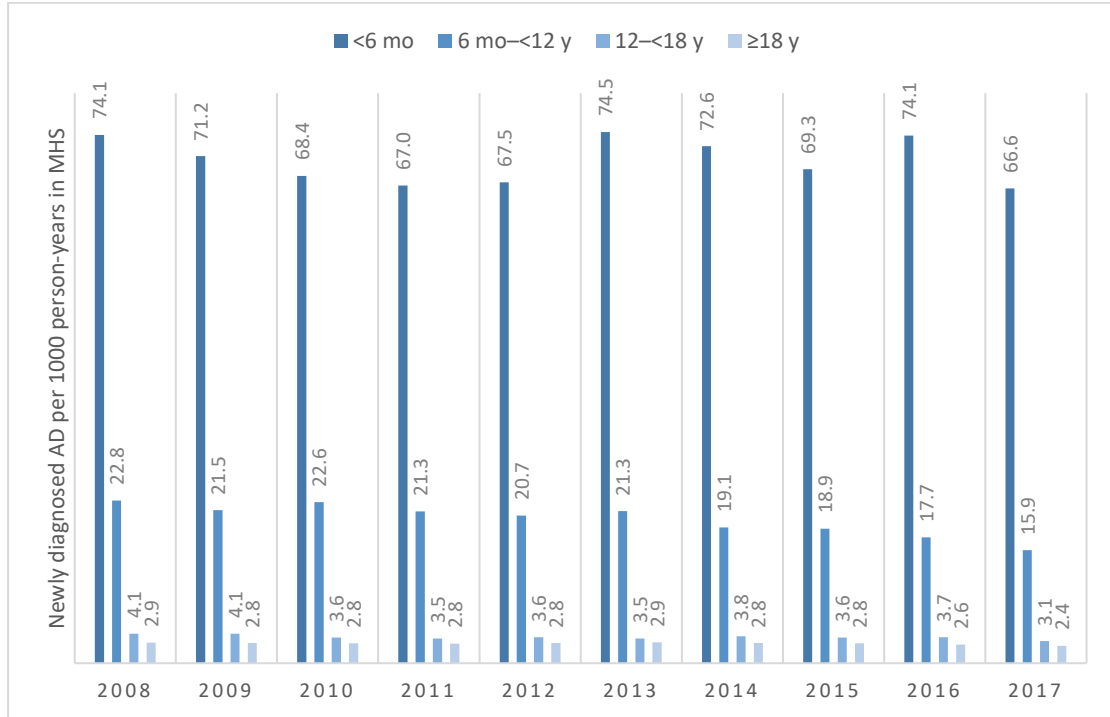
AD, atopic dermatitis; AZA, azathioprine; CsA, cyclosporine; MM, mycophenolate mofetil; MTX, methotrexate; SI, systemic immunomodulators; SC, systemic corticosteroids; TCI, topical calcineurin inhibitor; TCS, topical corticosteroids.

Bold numbers correspond to those used in the AD severity study definition

**Figure S1.** Selection of the AD study populations. AD, atopic dermatitis; MHS, Maccabi Healthcare Services; Y, year.

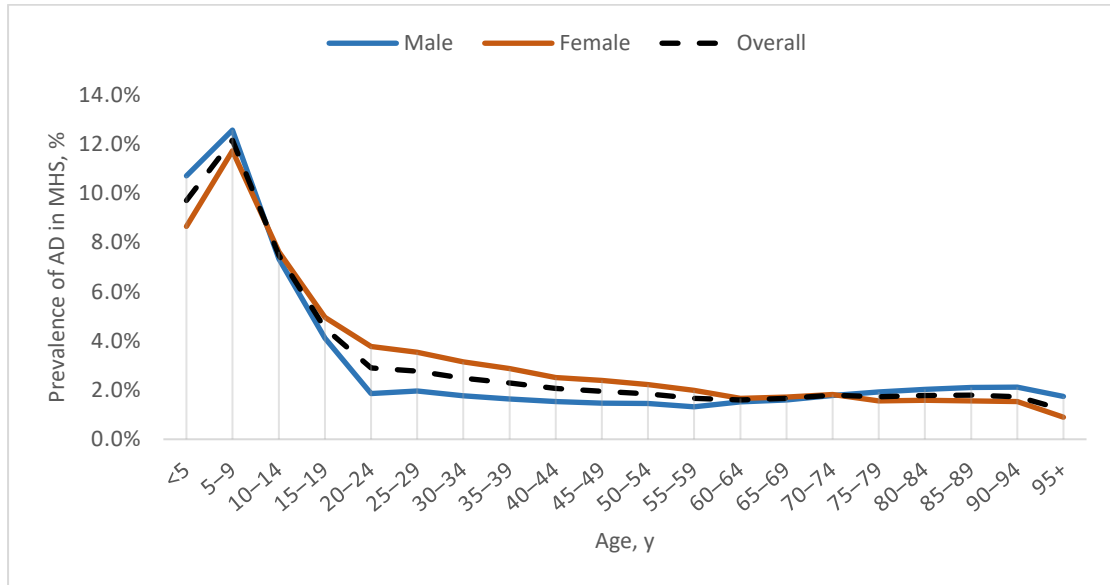


**Figure S2.** Age-specific incidence of AD by year (2008–2017). AD, atopic dermatitis; MHS, Maccabi Healthcare Services; mo, months; y, years.



**Figure S3.** Age-specific prevalence of AD by 5-year age groups (31 December 2017).

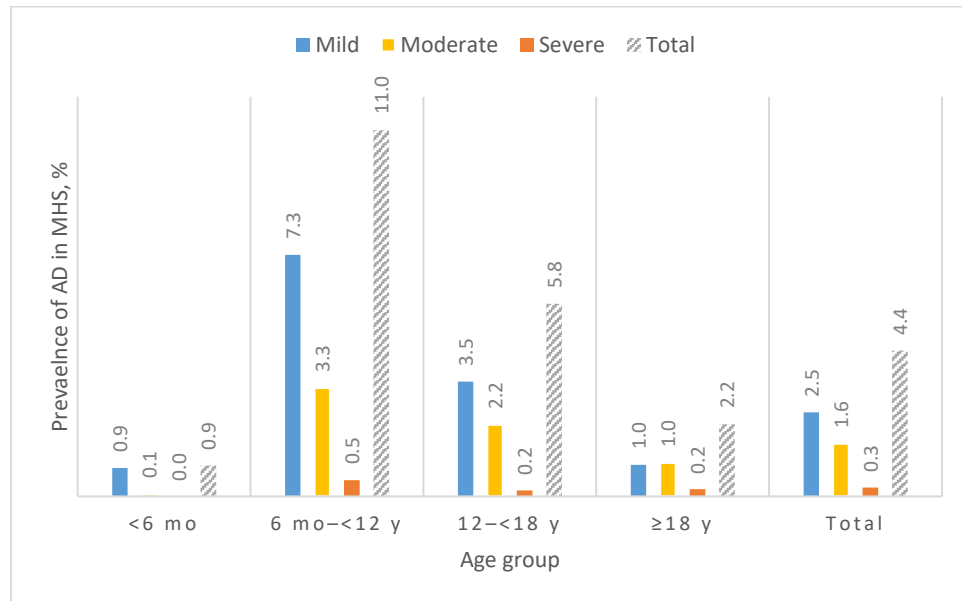
AD, atopic dermatitis; MHS, Maccabi Healthcare Services; y, years.



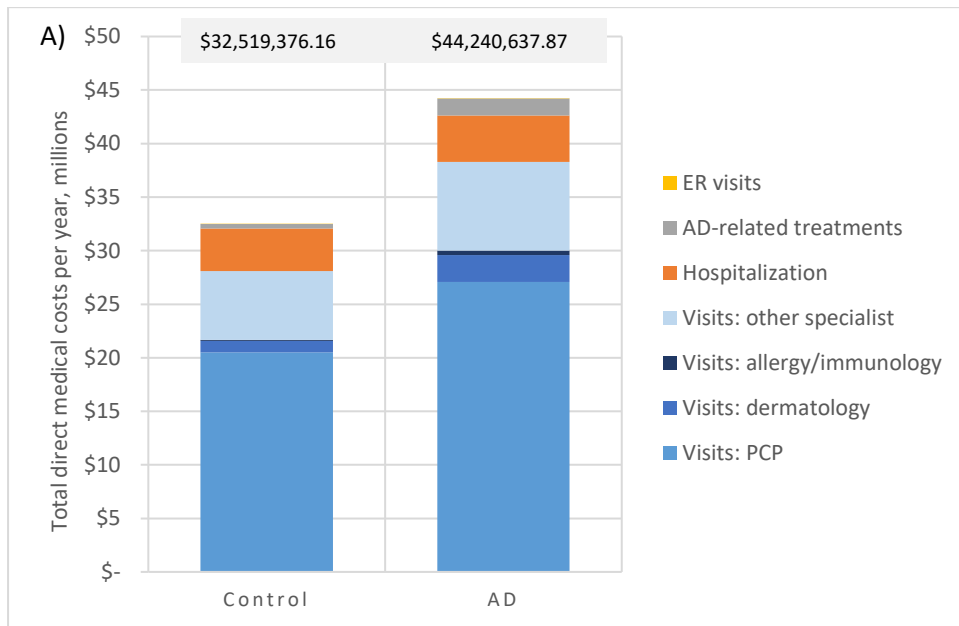
**Figure S4.** Age-specific prevalence of AD in Israel\* by severity (31 December 2017).

AD, atopic dermatitis; MHS, Maccabi Healthcare Services; mo, months; y, years.

\*MHS is a nationwide healthcare insurer and provider with >2.3 million members in 2017.



**Figure S5.** Comparison of annual direct medical costs among AD prevalence population versus non-AD matched controls in 2017 (N=92,632 matched pairs): (A) total population-level costs by healthcare resource (unadjusted), (B) estimated mean per-person costs per year (adjusted for age, sex, and residential area). All costs are 2017 US dollars. AD, atopic dermatitis; ER, emergency room; MHS, Maccabi Healthcare Services; mo, months; PCP, primary care physician; y, years.



B)

