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**Article:**

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<https://doi.org/10.1038/s41430-019-0398-9>

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## Supplementary information

**Supplementary Table 1.** Baseline characteristics of individual studies in the InterLACE consortium included in this study

Study	Country	Survey (year) selected for baseline	n	Age at baseline Median (Q1, Q3)	Survey (year) selected for follow-up
Australian Longitudinal Study on Women's Health (ALSWH)	Australia	Survey 3 (2001)	7,373	52 (51, 54)	Survey 4 (2004)
Healthy Ageing of Women Study (HOW)	Australia	Survey 1 (2001)	563	54 (52, 56)	Survey 2 (2006)
Whitehall II study (WHITEHALL)	UK	Survey 3 (1991-94)	2,146	50 (45, 56)	Survey 4 (1995-96)
Seattle Midlife Women's Health Study (SMWHS)	USA	Survey in year 2000	174	50 (46, 53)	N/A
Japanese Midlife Women's Health Study (JMWHS)	Japan	Survey 1 (2002)	750	N/A*	N/A
Overall			11,006	52 (51, 54) <sup>†</sup>	

Abbreviations: N/A – not applicable; Q1 – 25<sup>th</sup> percentile; Q3 – 75<sup>th</sup> percentile

\* JMWHS provided age by category only ( $\leq 55$  and  $> 55$  years), and 47% of women were aged more than 55 years (age range: 45-60 years)

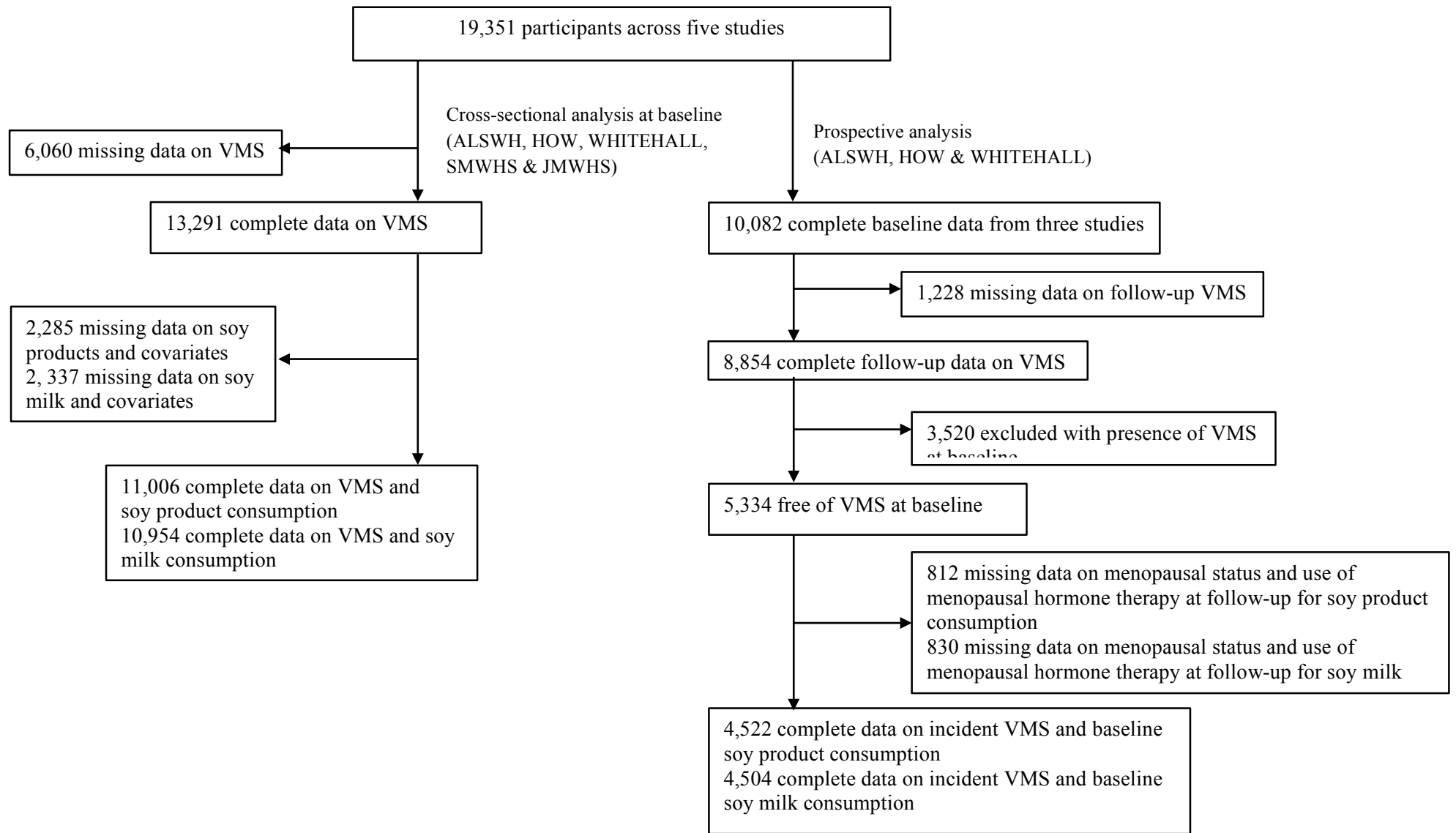
<sup>†</sup> Median age at baseline was based on four studies (ALSWH, HOW, WHITEHALL, SMWHS) with data on age as a continuous variable

**Supplementary Table 2.** Baseline characteristics of participants included and excluded for the prospective analysis

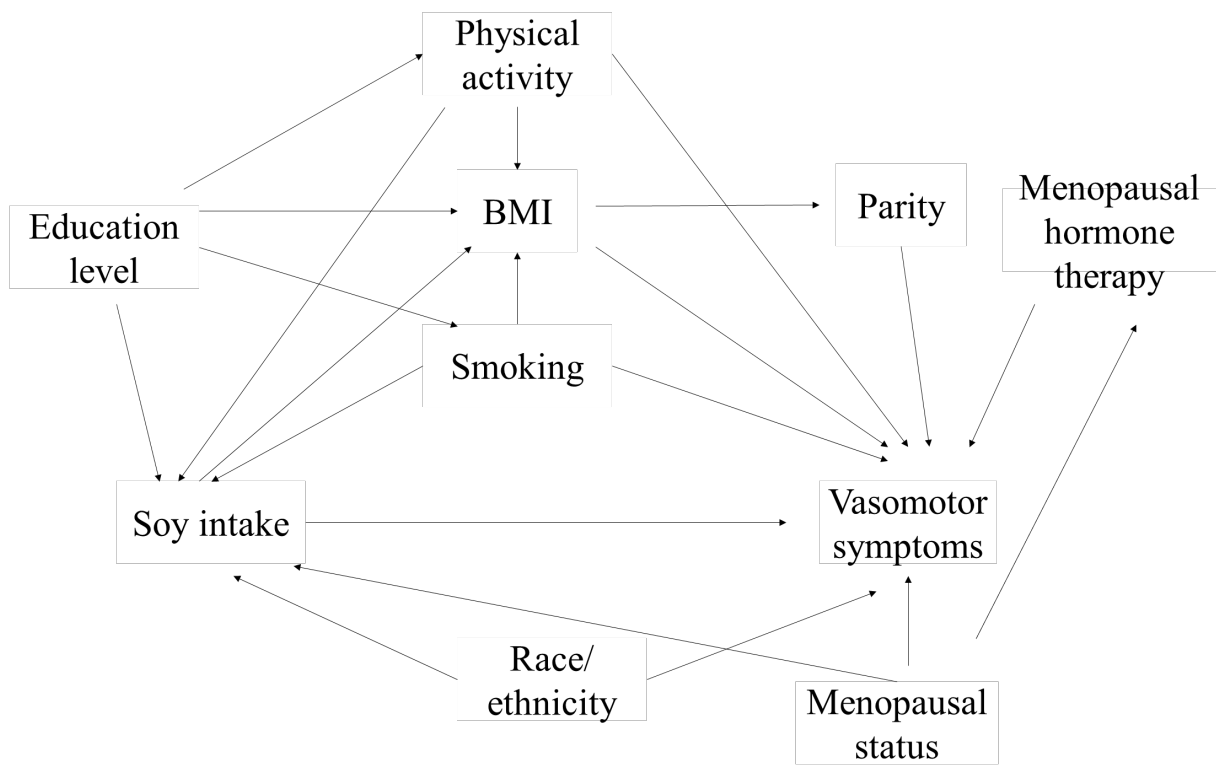
	Participants with complete data on VMS at follow-up (n=8,854)		Participants lost to follow-up (n=1,228)		<i>p</i>
	n	%	n	%	
<b>Race/ethnicity</b>					
Caucasian-Australian/New Zealand	5571	62.9	752	61.2	
Caucasian-European	2812	31.8	351	28.6	
Caucasian-American/Canadian	46	0.5	8	0.7	
Japanese	5	0.1	1	0.1	<0.01
Chinese & other Asians	112	1.3	39	3.2	
Others	308	3.5	77	6.3	
<b>Birth year</b>					
<1940	763	8.6	92	7.5	
1940-1949	6054	68.4	865	70.7	0.22
≥1950	2037	23.0	267	21.8	
<b>Education level</b>					
≤10 years	4369	49.3	656	53.4	
11-12 years	1484	16.8	222	18.1	<0.01
>12 years	3001	33.9	350	28.5	
<b>Marital status</b>					
Married	6917	78.3	895	73.4	
Separated/divorced/widowed	1299	14.7	246	20.2	<0.01
Single	616	7.0	78	6.4	
<b>Body mass index</b>					
Normal weight (<25 kg/m <sup>2</sup> )	3860	46.1	489	42.8	
Overweight (25-29.9 kg/m <sup>2</sup> )	2742	32.8	374	32.8	0.02
Obese (≥30 kg/m <sup>2</sup> )	1770	21.1	279	24.4	
<b>Smoking status</b>					
Never	5299	59.9	670	54.6	
Past smoker	2303	26.0	304	24.8	<0.01
Current smoker	1252	14.1	254	20.7	
<b>Menopausal status</b>					
Hysterectomy/oophorectomy	2183	24.7	327	26.6	
Unknown due to hormone use	1475	16.7	182	14.8	
Premenopause	996	11.3	125	10.2	<0.01
Perimenopause	1759	19.9	191	15.6	
Natural menopause	2441	27.6	403	32.8	
<b>Current use of menopausal hormone therapy</b>					
No	6371	72.0	854	69.5	0.08
Yes	2483	28.0	374	30.5	
<b>Frequency or severity of hot flushes</b>					
Never	3407	38.5	509	41.5	
Rarely or mild	1484	16.8	247	20.1	<0.01
Sometimes or moderate	2265	25.6	268	21.8	

Often or severe	1698	19.2	204	16.6	
<b>Frequency or severity of night sweats</b>					
Never	4194	47.4	618	50.3	
Rarely or mild	1421	16.1	211	17.2	0.05
Sometimes or moderate	1922	21.7	234	19.1	
Often or severe	1317	14.9	165	13.4	
<b>Frequency or severity of vasomotor symptoms<sup>a</sup></b>					
Never	3108	35.1	462	37.6	
Rarely or mild	1525	17.2	259	21.1	<0.01
Sometimes or moderate	2369	26.8	278	22.6	
Often or severe	1852	20.9	229	18.7	
<b>Consumption frequency of soy products</b>					
Never/rarely	8031	90.7	1081	88.0	
Monthly	398	4.5	71	5.8	0.01
Weekly	357	4.0	69	5.6	
Daily	68	0.8	7	0.6	
<b>Consumption frequency of soy milk</b>					
Never/rarely	8094	91.6	1103	90.5	
Monthly	51	0.6	16	1.3	0.01
Weekly	117	1.3	23	1.9	
Daily	570	6.5	77	6.3	

<sup>a</sup> Vasomotor menopausal symptoms were defined as having either hot flushes and/or night sweats



**Supplementary Figure 1.** Flow diagram of sample for cross-sectional analyses (included five studies) and prospective analyses (included three studies). ALSWH: Australian Longitudinal Study on Women's Health; JMWHS: Japanese Midlife Women's Health Study; HOW: Healthy Ageing of Women Study; SMWHS: Seattle Midlife Women's Health Study; VMS: Vasomotor menopausal symptoms; WHITEHALL: Whitehall II study



**Supplementary Figure 2.** Directed acyclic graph