

Web Material

Integrating Clinical and Epidemiological Data on Allergic Diseases Across Birth Cohorts: a MeDALL Harmonization Study

Marta Benet, Richard Albang, Mariona Pinart, Cynthia Hohmann, Christina G. Tischer, Isabella Annesi-Maesano, Nour Baïz, Carsten Bindslev-Jensen, Karin C. Lødrup Carlsen, Kai-Hakon Carlsen, Lourdes Cirugeda, Esben Eller, Maria Pia Fantini, Ulrike Gehring, Beatrix Gerhard, Davide Gori, Eva Hallner, Inger Kull, Jacopo Lenzi, Rosemary McEachan, Eleonora Minina, Isabelle Momas, Silvia Narduzzi, Emily S. Petherick, Daniela Porta, Fanny Ranci ere, Marie Standl, Maties Torrent, Alet H. Wijga, John Wright, Manolis Kogevinas, Stefano Guerra, Jordi Sunyer, Thomas Keil, Jean Bousquet, Dieter Maier, Josep M. Anto, and Judith Garcia-Aymerich

Web Tables 1-4

Web Figures 1-14

Web Table 1: Children Data Availability per Cohort and Follow-up Period for Harmonization in MeDALL, 14 Birth Cohorts from Nine European Countries

Cohort	AMICS - Menorca	BAMSE	ECA	GINIplus	LISAplus	MAS	PIAMA	BIB	EDEN	INMA SABADELL	PARIS	RHEA	ROBBIC ROMA	ROBBIC BOLOGNA	Total number of cohorts
Country of origin	Spain	Sweden	Norway	Germany	Germany	Germany	Netherlands	UK	France	Spain	France	Greece	Italy	Italy	
Starting year/s	1997/8	1994/6	1992/3	1996/8	1997/8	1990	1996/7	2007/9	2003/5	2004/7	2003/6	2007/8	2003/4	2004/5	
Number of participants ^a	485	4,089	3,754	5,991	3,097	1,314	3,963	13,776	1,896	657	4,115	1,497	709	654	
During pregnancy	1 ^b	1				1	1			1	1	1	1	1	
1m						1					1				2
3m						1	1				1				3
6m			1		1	1		1		1	1		1	1	8
9m											1	1			2
12m	1	1	1	1	1	1	1	1	1	1	1				11
15m													1	1	2
18m			1		1	1		1			1				5
24m	1	1	1	1	1	1	1	1	1	1	1				11
3y	1			1		1	1	1	1		1		1	1	9
4y	1	1		1	1	1	1	1	1	1	1	1			11
5y						1	1		1		1				4

6y	1			1	1	1	1				1				6
7y						1	1						1		3
8y		1				1	1		1		1				5
9y	1					1									2
10y			1	1	1	1									4
11y	1					1	1								3
12y		1				1									2
13y						1									1
14y	1						1								2
15y				1	1	1									3
16y			1												1
20y						1									1
Total number of follow-up periods	9	6	6	7	8	20	12	6	6	5	13	3	5	4	110 ^c

AMICS-Menorca, Asthma Multicenter Infants Cohort Study; BAMSE study, Children Allergy, Milieu, Stockholm, Epidemiology; BIB, Born in Bradford; ECA, Environment and Childhood Asthma study in Oslo; EDEN, Study of the determinants pre and postnatal of child health and development; GINIplus, German Infant Study on the influence of Nutrition Intervention PLUS environmental and genetic influences on allergy development; INMA Sabadell, Environmental and childhood Project – Sabadell; LISApplus, Influence of life-style factors on the development of the immune system and allergies in East and West Germany Plus the influence of traffic emissions and genetics; MAS, Multicenter Allergy Study; PARIS, Pollution and Asthma Risk: An Infant Study; PIAMA, Prevention and Incidence of Asthma and Mite Allergy; RHEA, Mother-child cohort in Crete; ROBBIC–Rome, Rome and Bologna Birth Italian Cohorts – Rome; ROBBIC–Bologna, Rome and Bologna Birth Italian Cohorts – Bologna.

^aapproximate number of participants per cohort and follow-up periods.

^beach empty cell indicates that, at that follow-up period, the cohort did not have data available, if the cell has the number one “1” indicates that the cohort at that follow-up period had data available.

^cthe total number of cohort and follow-up periods, 110 correspond to those assessed during the consensus workshop.

Web Table 2: List of Candidate Variables Together with Their Corresponding Reference

Definitions Before and After^a the Consensus Agreement Workshop, by Dimensions

Dimension and candidate variables	Reference definitions and its respective answers
(i) Symptoms <i>Asthma and wheezing</i>	
Wheezing ever	Has your child ever had wheezing or whistling in the chest at any time in the past? (Yes/No)
Age of wheezing onset	If yes, at what age did it occur? ___months/years
Wheezing in the last 12 months	Has your child had wheezing or whistling in the chest in the past 12 months? (Yes/No)
Number of wheezing attacks in the last 12 months	If yes, how many attacks* of wheezing has your child had in the past 12 months? None 1 to 3 4 to 12 More than 12 *distinct episodes of wheezing
In which of the last 12 months did this wheezing or whistling in the chest first occur?	In which of the past 12 months did the wheezing/breathing difficulties (chest tightness, shortness of breath) occur? (You may choose several answers) Please tick all months that apply: January, February, March, April, May, June, July, August, September, October, November, December
In the last 12 months, has this wheezing or whistling in the chest been accompanied by an attack of breathlessness?	Has your child had this wheezing or whistling in the chest been accompanied by an attack of breathlessness (dyspnea) at least once in the past 12 months? (Yes/No)
Breathing difficulties (chest tightness, shortness of breath) in the last 12 months	Has your child had breathing difficulties (chest tightness, shortness of breath) in the past 12 months? (Yes/No)
In the last 12 months, how many <u>breathing difficulties</u> attacks of breathlessness has your child had?	How often did you (your child) suffer from breathing difficulties (attack of breathlessness, chest tightness, shortness of breath) in the past 12 months? None 1 to 3 4 to 12 More than 12
Wheezing after exercise last 12 months	In the past 12 months, has your child's chest sounded wheezy during or after exercise? (Yes/No)
Doctor diagnosis of asthma ever	Has your child ever been diagnosed by a doctor as having asthma? (Yes/No)
<u>Lower</u> rRespiratory <u>tract</u> infection last 12 months	In the past 12 months has a doctor said that your child has had a chest <u>lower respiratory tract</u> infection? (Yes/No)

Congested in the chest or coughed up phlegm (when no cold) last 12 months	In the last 12 months, has your child usually seemed congested in the chest or coughed up phlegm (mucus) when he/she did not have a cold? (Yes/No)
Breathless speech in the last 12 months	In the past 12 months, have breathing difficulties (wheezing, chest tightness, shortness of breath) ever been severe enough to limit your (child's) speech to only one or two words at a time between breaths? (Yes/No)
Sleep disturbed by wheeze in the last 12 months	In the past 12 months, how often, on average, has your child's sleep been disturbed due to wheezing? - Never woken with wheezing - Less than one night per week - One or more nights per week
Sleep disturbed by breathlessness in the last 12 months	In the past 12 months, how often, on average, has your (child's) sleep been disturbed due to breathing difficulties (attack of breathlessness, chest tightness, shortness of breath)? - Never woken with breathing difficulties - Less than one night per week - One or more nights per week
Cough at night (when no cold) in the last 12 months	In the past 12 months, has your child had a dry cough at night, apart from a cough associated with a cold or chest infection? (Yes/No)

Rhinitis

Sneezing or a runny or blocked nose ever (when no cold)	Has your child ever had a problem with sneezing or a runny or blocked nose when he/she did not have a cold or the flu? (Yes/No)
Sneezing or a runny or blocked nose in the last 12 months (when no cold)	In the past 12 months, has your child had problems with sneezing or a runny or blocked nose when he/she DID NOT have a cold or flu? (Yes/No)
Sneezing attacks symptoms: sneezing	If yes, please specify which of the symptoms your child had in the past 12 months when he/she DID NOT have a cold or the flu (You may choose several answers) Please tick all items that apply: - sneezing: Yes/No
Sneezing attacks symptoms: runny nose	If yes, please specify which of the symptoms your child had in the past 12 months when he/she DID NOT have a cold or the flu (You may choose several answers) Please tick all items that apply: - runny nose: Yes/No
Sneezing attacks symptoms: blocked nose	If yes, please specify which of the symptoms your child had in the past 12 months when he/she DID NOT have a cold or the flu (You may choose several answers) Please tick all items that apply: - blocked nose: Yes/No

In which of the last 12 months did this nose problem occur?

In which of the past 12 months did this problem with your child's nose occur? (You may choose several answers) Please tick any which apply: January, February, March, April, May, June, July, August, September, October, November, December

Itchy watery eyes in the last 12 months (when no cold)

If yes, in the past 12 months, has this nose problem been accompanied by itchy-watery eyes? (Yes/No)

Doctor diagnosis of allergic rhinitis ever

Has a doctor ever diagnosed your child as having hay fever or allergic rhinitis? (Yes/No)

Eczema

Itchy rash ever

Has your child ever had an itchy rash which was coming and going for at least 6 months? (Yes/No)

Itchy rash in the last 12 months

Has your child had an itchy rash which was coming and going (intermittently) at any time in the past 12 months? (Yes/No)

Affected areas by itchy rash

Has this itchy rash at any time affected any of the following places (You may choose several answers)? ~~Please tick all that apply:~~ (Yes/No)

- the folds of the elbows
- behind the knees
- in front of the ankles
- under the buttocks, or
- around the neck, ears or face

Itchy rash cleared during the last 12 months

Has this rash cleared completely at any time during the past 12 months? (Yes/No)

Sleep disturbed by itchy rash in the last 12 months

In the past 12 months, how often, on average, has your child been kept awake at night by this itchy rash?

- Never in the last 12 months;
- < 1 night per week;
- One or more nights per week

~~Atopic dermatitis~~

~~Has a doctor ever diagnosed your child as having atopic dermatitis? (Yes/No)~~

Doctor diagnosis of eczema ever

Has your child ever been diagnosed by doctor with having eczema/atopic dermatitis? (Yes/No)

Other allergic related variables

Food hypersensitivity ever

Has your child ever had an allergic reaction to food? (Yes/No)

Urticaria ever

Has your child ever had a rash characterized by pale itchy bumps similar to mosquito bites or blisters, that appeared and disappeared again within a day or two (i.e. nettle rash)? (Yes/No)

Allergy to drugs ever

Has your child ever had one or several abnormal reactions after taking a medicine or after a vaccination? (Yes/No)

Severe allergic reactions/anaphylaxis ever	Has your child <u>ever</u> been hospitalized due to severe allergic reactions? (Yes/No)
<i>Sleep: quantity</i>	How many hours on average per day do your child sleep INCLUDING naps? _____ hours
<i>Family history of allergic diseases</i>	
Maternal asthma ever	Has the mother ever had asthma? <u>(Yes/No)</u> -No -Yes, doctor diagnosed -Yes, self diagnosed -Yes, doctor and self diagnosed
Age of maternal asthma onset	If yes, how old was the mother at the onset of her asthma? _____ years
Maternal eczema ever	Has the mother ever had eczema (excluding contact dermatitis and psoriasis)? <u>(Yes/No)</u> -No -Yes, doctor diagnosed -Yes, self diagnosed -Yes, doctor and self diagnosed
Age of maternal eczema onset	If yes, how old was the mother at the onset of her atopic eczema? _____ years
Maternal allergic rhinitis ever	Has the mother ever had hay fever or allergic rhinitis? <u>(Yes/No)</u> -No -Yes, doctor diagnosed -Yes, self diagnosed -Yes, doctor and self diagnosed
Age of maternal allergic rhinitis onset	If yes, how old was the mother at the onset of her allergic rhinitis/hay fever? _____ years
Paternal asthma ever	Has the father ever had asthma? <u>(Yes/No)</u> -No -Yes, doctor diagnosed -Yes, self diagnosed -Yes, doctor and self diagnosed
Age of paternal asthma onset	If yes, how old was he at the onset of his asthma? _____ years
Paternal eczema ever	Has the father ever had eczema (excluding contact dermatitis and psoriasis)? <u>(Yes/No)</u> -No -Yes, doctor diagnosed -Yes, self diagnosed -Yes, doctor and self diagnosed
Age of paternal eczema onset	If yes, how old was he at the onset of his atopic eczema? _____ years

Paternal allergic rhinitis ever

Has the father ever had hay fever or allergic rhinitis?

(Yes/No)

~~- No~~

~~- Yes, doctor diagnosed~~

~~- Yes, self-diagnosed~~

~~- Yes, doctor and self-diagnosed~~

Age of paternal rhinitis onset

If yes, how old was he at the onset of his allergic rhinitis/hay fever? _____ years

Puberty

Puberty – height

Would you say that your growth in height:

- Has not yet begun to spurt

- Has barely started

- Is definitely underway

- Seems completed

- I don't know

Puberty – body hair

And how about the growth of your body hair? ("Body hair" means hair any place other than your head, such as under your arms.) Would you say that your body hair growth:

- Has not yet begun to grow

- Has barely started to grow

- Is definitely underway

- Seems completed

- I don't know

Puberty – skin changes

Have you noticed any skin changes, especially pimples?

- Skin has not yet started changing

- Skin has barely started changing

- Skin changes are definitely underway

- Skin changes seem complete

- I don't know

Puberty – boys: voice

Have you noticed a deepening of your voice?

- Voice has not yet started changing

- Voice has barely started changing

- Voice changes are definitely underway

- Voice changes seem complete

- I don't know

Puberty – boys: facial hair

Have you begun to grow hair on your face?

- Facial hair has not yet started growing

- Facial hair has barely started growing

- Facial hair growth has definitely started

- Facial hair growth seems complete

- I don't know

Puberty – girls: breast growth

Have you noticed that your breasts have begun to grow?

- Have not yet started growing

- Have barely started growing

- Breast growth is definitely underway

- Breast growth seems complete

- I don't know

Puberty – girls: menstruation

Have you begun to menstruate (started to have your period)? (Yes/No)

Puberty – girls: menstruation started

If yes, how old were you when you started to menstruate? ____ years and ____ months (age in years and months)

(ii) Treatment

Treatment for allergic diseases

Treatment for asthma or breathing difficulties: ~~prescription~~ current treatment last 12 months

Has your child taken any medicines for asthma or breathing difficulties (wheezing, chest tightness, shortness of breath) in the last 12 months? (include any inhalers, nebulizers, tablets or liquid medicines) (Yes/No)

(1) Prescription medication

(2) Non-prescription medication

Treatment for asthma or breathing difficulties: oral steroids last 12 months

Has your child taken any medicines for asthma or breathing difficulties (wheezing, chest tightness, shortness of breath) in the last 12 months? (include any inhalers, nebulizers, tablets or liquid medicines)

Has your child taken oral steroids for at least 3 days in a row? (Yes/No)

~~Treatment for asthma or breathing difficulties: non-prescription medication~~

~~(2) Non-prescription medication No/Yes~~

Treatment for asthma or breathing difficulties: inhaled steroids last 12 months

Has your child taken any medicines for asthma or breathing difficulties (wheezing, chest tightness, shortness of breath) in the last 12 months? (include any inhalers, nebulizers, tablets or liquid medicines)

Has your child ever taken inhaled steroids?

Treatment for asthma or breathing difficulties: age of first inhaled steroids

If yes, how old was your child when he/she received inhaled steroids for the first time?

Treatment for asthma or breathing difficulties: duration of inhaled steroids use

On average, how long did your child take inhaled steroids since birth? Specify the number of weeks (months?).

Treatment for asthma or breathing difficulties: alternative treatment ever

Has your child ever been treated for wheezing/breathing difficulties with homoeopathy or acupuncture? (Yes/No)

Treatment for nasal allergy/hay fever last 12 months

Did your child take any medicines, tablets nasal sprays or eye drops against nasal allergy/hay fever in the past 12 months? (Yes/No)

Eczema or atopic dermatitis treatment in the past 12 months

Has your child needed cortisone cream for itchy rash at any time in the past 12 months? (Yes/No)

Alternative treatment for eczema/atopic dermatitis ever

Has your child ever been treated for eczema/atopic dermatitis with homoeopathy or acupuncture? (Yes/No)

Treatment against allergy/immunotherapy ever

Did your child ever receive special injections or other treatments against allergy ("allergy vaccine"), immunotherapy, hyposensitization or desensitization? (Yes/No)

Doctor consultations for allergic diseases

Hospital admission/emergency due to respiratory symptoms first 2 years of life

Has your child being admitted to the hospital or attended in the emergency service for respiratory symptoms in the first 2 years of life? (Yes/No)

Number of doctor consultations (scheduled and emergency) due to breathing difficulties last 12 months

How often did you have to see a doctor or attend a hospital with your child urgently because of breathing difficulties (chest tightness, shortness of breath) in the last 12 months? Number: _____

Number of doctor consultations (scheduled and emergency) due to food reaction last 12 months

In the last 12 months, how often has your child been seen by a doctor for food reaction, other than during or immediately after an actual episode?

Number of doctor consultations (scheduled and emergency) due to reactions to drugs last 12 months

In the last 12 months, how often has your child been seen by a doctor for reactions to drugs, other than during or immediately after an actual episode?

Number of doctor consultations (scheduled and emergency) due to reactions to vaccines last 12 months

In the last 12 months, how often has your child been seen by a doctor for reactions to vaccines, other than during or immediately after an actual episode?

Triggers of allergic diseases in the last 12 months

Triggers of wheezing or whistling in the chest: weather

In the past 12 months, which of these factors do you think triggered your child's wheezing or whistling in the chest? (Please tick any which apply):
Weather change (coldness, fog)

Triggers of wheezing or whistling in the chest: pollen

Pollen

Triggers of wheezing or whistling in the chest: gas, vapors, fumes

Gas exhaust, vapors, fumes

Triggers of wheezing or whistling in the chest: dust

Dust

Triggers of wheezing or whistling in the chest: pets

Pets

Triggers of wheezing or whistling in the chest: cold, flu

Cold, flu or other respiratory infection

Triggers of wheezing or whistling in the chest: tobacco smoke

Tobacco smoke

Triggers of wheezing or whistling in the chest: emotion, stress

Emotion, stress

Triggers of wheezing or whistling in the chest: tears, laughter, excitation

Tears, laughter, excitation

Triggers of wheezing or whistling in the chest: wool clothes

Wool clothes

Triggers of wheezing or whistling in the chest: food or drink	Food or drink
Triggers of wheezing or whistling in the chest: soap, spray, cleaning product	Soap, spray, cleaning product
Triggers of wheezing or whistling in the chest: odors	Strong odors
Triggers of wheezing or whistling in the chest: exercise	Exercise (during or after)
Triggers of rhinitis: animals, dust, mites	In the past 12 months, did your child have trouble with the nose or eyes (without having a cold) in association with one of the following? (You may choose several answers) Please tick all items that apply: Animals, dust, mites (Yes/No/Don't know)
Triggers of rhinitis: grass, trees, flowers	Grass, trees, flowers (Yes/No/Don't know)
Triggers of rhinitis: tobacco smoke	Tobacco smoke (Yes/No/Don't know)
Triggers of rhinitis: house dust	House dust (Yes/No/Don't know)
Triggers of rhinitis: air pollutants	Air pollutants e.g. gas exhaust, vapors, fumes spray, cleaning products, heavy scent (Yes/No/Don't know)

School or outdoor activities absenteeism due to allergic diseases in the last 12 months

Absenteeism (child and parents) due to nasal allergy: sleep	In the past 12 months, how often has your child been disturbed by a runny/itchy/blocked nose or itchy/watery/red eyes in the following activities: Sleep: - Never - Very occasionally - Frequently - Most of the time
Absenteeism (child and parents) due to nasal allergy: school homework	In the past 12 months, how often has your child been disturbed by a runny/itchy/blocked nose or itchy/watery/red eyes in the following activities: School/homework: - Never - Very occasionally - Frequently - Most of the time
Absenteeism (child and parents) due to nasal allergy: outdoor activities	In the past 12 months, how often has your child been disturbed by a runny/itchy/blocked nose or itchy/watery/red eyes in the following activities: Outdoor activities: - Never - Very occasionally - Frequently - Most of the time

Absenteeism (child and parents) due to nasal allergy: any activity

In the past 12 months, how often has your child been disturbed by a runny/itchy/blocked nose or itchy/watery/red eyes in the following activities:

Any normal activity:

- Never

- Very occasionally

- Frequently

- Most of the time

(iii) Environmental exposures

Indoor exposures

Gas cooking

Do you use gas for cooking? (Yes/No)

Dampness

Would you consider your house or flat as damp (drops on windows, damp stains, water damage)? (Yes/No)

Molds in the dwelling

Is there mold or are there mold stains within your dwelling (except on food)? (Yes/No)

Molds in the rooms: child bedroom

If yes, in which rooms of the flat or house? (Yes/No)

- Room or bedroom of the child

- ~~Rest of the flat~~

- ~~Basement~~

Molds in the rooms: rest of flat

If yes, in which rooms of the flat or house? (Yes/No)

- Rest of the flat

Molds in the rooms: basement

If yes, in which rooms of the flat or house? (Yes/No)

- Basement

Pets

Do you (currently) have pets at home (i.e. living inside your home)? Did you ever have pets at home? (Yes/No)

Dog

Do you (currently) have a dog at home (i.e. living inside your home)? (Yes/No)

Cat

Do you (currently) have a cat at home (i.e. living inside your home)? (Yes/No)

Smoking exposures

Maternal smoking during pregnancy

Did the mother smoke during pregnancy? (Yes/No)

Maternal smoking during pregnancy: quantity

If the mother did smoke during pregnancy: no. of cigarettes/day

Maternal smoking during pregnancy: 1st term

Did the mother smoke during the 1st term of pregnancy? (Yes/No)

Maternal smoking during pregnancy: 1st term, quantity

If the mother did smoke during the 1st term of pregnancy: no. of cigarettes/day

Maternal smoking during pregnancy: 2nd term

Did the mother smoke during the 2nd term of pregnancy? (Yes/No)

Maternal smoking during pregnancy: 2nd term, quantity

If the mother did smoke during the 2nd term of pregnancy: no. of cigarettes/day

Maternal smoking during pregnancy: 3rd term

Did the mother smoke during the 3rd term of pregnancy? (Yes/No)

Maternal smoking during pregnancy: 3rd term, quantity

If the mother did smoke during the 3rd term of pregnancy: no. of cigarettes/day

Paternal smoking during pregnancy

Did the father smoke during pregnancy? (Yes/No)

Paternal smoking during pregnancy: quantity

If the father did smoke during pregnancy: no. of cigarettes/day

Maternal smoking: inside the home

Does the child's mother smoke inside the home? (Yes/No)

Maternal n° cigarettes smoked occasionally inside

If occasionally, number of cigarettes per week inside the home: __

Maternal n° cigarettes smoked regularly inside

If regularly (every day), number of cigarettes per day inside the home: __

Paternal smoking: inside the home

Does the child's father smoke inside the home? (Yes/No)

Paternal n° cigarettes smoked occasionally inside

If occasionally, number of cigarettes per week inside the home: __

Paternal n° cigarettes smoked regularly inside

If regularly (every day), number of cigarettes per day inside the home: __

Others smoking: inside the home

Do others (except the child) smoke inside the home? (Yes/No)

Others n° cigarettes smoked occasionally inside

If occasionally, number of cigarettes per week inside the home: __

Others n° cigarettes smoked regularly inside

If regularly (every day), number of cigarettes per day inside the home: __

(iv) Sociodemographic

Parity at birth ~~Older siblings (from birth questionnaire)~~

How many other children have you given birth to are there in your home ~~(excluding this child)?~~

~~Other children at home/number of brothers and sisters~~

How many children are there in your home (excluding this child)?

~~Ethnicity~~

~~Ethnicity considered as local or non-local~~

Country of birth: mother

Country of birth of the mother

Country of birth: father

Country of birth of the father

Ethnicity: mother

Ethnicity of the mother

Ethnicity: father

Ethnicity of the father

Socio-economic status

To provide a categorical variable in 3 categories (according to each cohort classification):

- Low
- Medium
- High

Educational level: mother

Educational level of the mother:

- Low
- Medium
- High

Educational level: father

Educational level of the father:

- Low
- Medium
- High

(v) Physical activity

Watching TV/playing computer or videogames: during the week

How much time on average per day does your child spend watching TV/DVDs or playing computer games*?

A. During the week: Hours ____ Mins ____

*for children aged >7 years

Watching TV/playing computer or videogames: during the weekend

How much time on average per day does your child spend watching TV/DVDs or playing computer games*?

B. Weekends: Hours ____ Mins ____

*for children aged >7 years

Physical activity and regular training: vigorous activities summer

The questions will ask you about the time you spent being physically active during a typical week in summer or winter. Please think about the activities you do at school or work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport. Please answer each question even if you do not consider yourself to be an active person.

- During a typical week in the last 12 months, on how many hours did you do vigorous physical activities (lots of sweating, much harder breathing than normal, e.g. heavy lifting, digging, aerobics, or fast bicycling)?

summer _____ hours per week

Physical activity and regular training: vigorous activities winter

- During a typical week in the last 12 months, on how many hours did you do vigorous physical activities (lots of sweating, much harder breathing than normal, e.g. heavy lifting, digging, aerobics, or fast bicycling)?

winter _____ hours per week

Physical activity and regular training: moderate activities summer

- During a typical week in the last 12 months, on how many hours did you do moderate physical activities (light sweating, slightly more breathing than normal, e.g. carrying light loads, bicycling at a regular pace, or swimming)?

summer _____ hours per week

Physical activity and regular training: moderate activities winter

- During a typical week in the last 12 months, on how many hours did you do moderate physical activities (light sweating, slightly more breathing than normal, e.g. carrying light loads, bicycling at a regular pace, or swimming)?
winter _____ hours per week

Physical activity and regular training: light activities summer

- During a typical week in the last 12 months, on how many hours did you do light physical activity (no sweating, normal breathing, e.g. walking)?
summer _____ hours per week

Physical activity and regular training: light activities winter

- During a typical week in the last 12 months, on how many hours did you do light physical activity (no sweating, normal breathing, e.g. walking)?
winter _____ hours per week

^aText (single words, sentences, answer categories or variables with their corresponding reference definition) is in *italics and underlined* when it was added during the workshop; ~~struck through~~ when it was removed from the original proposal; and no highlighted when no changes were done during the workshop.

Web Table 3: List of ‘Basic Harmonization Needed’ Variables and Unit/Categories

Agreement

Variable	Agreement of Units/Categories
Age	Months when less than five years of age, Years when five or more years of age
Folic acid supplementation during pregnancy	No, Yes
Mode of delivery: cesarean section	No, Yes
Gestational age at birth	Weeks
Birth weight	Grams
Breastfeeding duration	Weeks
Gender	Female, Male
Height – measured ^a	Centimeters
Height – reported	Centimeters
Weight – measured ^a	Kilograms
Weight – reported	Kilograms
Systolic blood pressure	mmHg
Diastolic blood pressure	mmHg
Forced expiratory volume in one second pre bronchodilator	Liters
Forced expiratory volume in one second post bronchodilator	Liters
Total IgE	IU/ml
Specific IgE to house dust mite	Negative, Positive ^b
Specific IgE to cat	Negative, Positive ^b
Specific IgE to dog	Negative, Positive ^b
Specific IgE to birch	Negative, Positive ^b
Specific IgE to alternaria	Negative, Positive ^b
Specific IgE to milk	Negative, Positive ^b
Specific IgE to egg	Negative, Positive ^b
Specific IgE to peanuts	Negative, Positive ^b
Skin prick test to house dust mite	Millimeters of wheel diameter
Skin prick test to cat	Millimeters of wheel diameter
Skin prick test to dog	Millimeters of wheel diameter
Skin prick test to birch	Millimeters of wheel diameter

^aSelf-report of a measure was considered “reported”

^bCohort-specific cut-offs

Web Table 4: Inferential Equivalence Classification for all Variables According to Cohort and Period in 14 Birth Cohorts from Nine European Countries

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
(i) Symptoms																								
<i>Asthma and wheezing</i>																								
Wheezing ever		PARI	PARI	ECA LISA IN-S PARI RO-R RO-B	PARI RHEA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	RO-R RO-B	ECA LISA	AMIC BAM ECA GINI LISA EDEN IN-S PARI	AMIC GINI PIAM EDEN PARI	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI RHEA	PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS	BAM MAS	MAS	AMIC	GINI MAS	ECA	MAS
Age of wheezing onset		PARI	PARI	ECA LISA PARI	PARI RHEA	AMIC BAM ECA GINI LISA PIAM EDEN PARI		ECA LISA PARI	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI PIAM PARI	AMIC BAM GINI LISA PIAM IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	PIAM RO-R	BAM MAS PIAM PARI	MAS	ECA GINI	PIAM	BAM		PIAM	GINI	ECA	MAS
Wheezing last 12m			MAS	ECA LISA MAS IN-S		AMIC BAM ECA GINI LISA MAS PIAM EDEN IN-S PARI	RO-R	ECA LISA MAS	AMIC BAM ECA GINI LISA MAS PIAM EDEN IN-S PARI	AMIC GINI MAS PIAM EDEN PARI RO-B	AMIC BAM GINI LISA MAS PIAM BIB EDEN IN-S PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Number wheezing attacks last 12m				ECA LISA IN-S		BAM ECA GINI LISA PIAM EDEN IN-S PARI		ECA LISA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	AMIC GINI MAS PIAM EDEN PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB EDEN IN-S PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS	
Month in which wheezing occurred last 12m				ECA BIB		ECA BIB PARI		ECA BIB	ECA BIB PARI	BIB PARI	LISA BIB PARI	MAS PARI	PARI		PARI						AMIC		ECA		
Wheezing accompanied by breathlessness attack last 12m				ECA RO-R RO-B	RHEA	PARI	RO-R RO-B		ECA PARI	PARI RO-R	AMIC BIB IN-S PARI RHEA	PARI	AMIC PARI	RO-R	PARI	AMIC									
Breathing difficulties last 12m						BAM ECA		ECA	BAM ECA	PIAM	BAM LISA PIAM BIB RHEA	PIAM	AMIC LISA PIAM	PIAM	MAS PIAM	MAS	MAS	MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	MAS	ECA	MAS
Number breathing difficulties last 12m				ECA	RHEA	ECA PARI		ECA	ECA PARI	PIAM PARI	AMIC BAM PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC PIAM PARI	PIAM	MAS PIAM PARI		ECA	PIAM	BAM		PIAM		ECA	MAS	
Wheezing after exercise last 12m				ECA		BAM ECA PARI		ECA	BAM ECA GINI PARI	AMIC GINI MAS PIAM PARI	AMIC BAM GINI LISA MAS PIAM BIB IN-S PARI RHEA	MAS PIAM PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Doctor diagnosis asthma ever				ECA LISA RO-R RO-B		BAM ECA GINI LISA PIAM EDEN PARI	RO-R RO-B	ECA LISA	AMIC BAM ECA GINI LISA PIAM EDEN PARI	AMIC GINI PIAM EDEN PARI RO-R RO-B	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI RHEA	PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS	
Lower respiratory tract infection last 12m				ECA LISA IN-S RO-R RO-B	RHEA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	RO-R RO-B	ECA LISA	BAM ECA GINI LISA PIAM EDEN IN-S PARI	AMIC GINI PIAM EDEN PARI	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI RHEA	PIAM EDEN PARI	AMIC GINI LISA PIAM PARI	PIAM	PIAM EDEN PARI	AMIC	ECA GINI LISA	PIAM	MAS	MAS	PIAM	GINI MAS	ECA	MAS	
Chest congestion last 12m				IN-S RO-R RO-B		AMIC ECA IN-S	RO-R RO-B		AMIC IN-S	AMIC PIAM RO-R RO-B	AMIC PIAM BIB IN-S RHEA	PIAM	AMIC PIAM	PIAM	PIAM	AMIC		PIAM				AMIC PIAM			
Breathless speech last 12m						PARI			PARI	MAS PIAM PARI RO-B	MAS PIAM BIB PARI RHEA	MAS PIAM PARI	AMIC GINI MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM PARI	AMIC MAS	GINI LISA	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS		MAS	
Sleep disturbed by wheeze last 12m				LISA		GINI LISA PIAM EDEN PARI		LISA	AMIC GINI LISA PIAM EDEN PARI	AMIC GINI MAS PIAM EDEN PARI RO-B	AMIC GINI MAS PIAM BIB EDEN IN-S PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM EDEN PARI	AMIC MAS	GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS		MAS	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Sleep disturbed by breathlessness last 12m						PARI			PARI	PIAM PARI	BAM PIAM BIB PARI RHEA	PIAM PARI	PIAM PARI	PIAM	BAM PIAM PARI			PIAM				AMIC PIAM			
Cough at night (when no cold) last 12m				ECA		BAM GINI LISA PIAM PARI		ECA LISA	AMIC BAM ECA GINI LISA PIAM PARI	AMIC GINI PIAM PARI RO-B	AMIC BAM GINI LISA PIAM BIB PARI RHEA	MAS PIAM PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM PARI	AMIC MAS	GINI LISA MAS	MAS PIAM	MAS	MAS		AMIC PIAM	GINI MAS		MAS
<i>Rhinitis</i>																									
Sneezing or runny or blocked nose ever					RHEA	GINI LISA MAS PIAM EDEN PARI		LISA MAS	GINI LISA MAS PIAM EDEN PARI	GINI MAS PIAM BIB EDEN PARI RO-B	GINI LISA PIAM BIB EDEN PARI	PIAM EDEN PARI	GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI MAS	MAS PIAM	BAM MAS	MAS		PIAM	GINI MAS	ECA	MAS
Sneezing or runny or blocked nose last 12m				MAS	RHEA	GINI LISA MAS PIAM EDEN PARI		LISA MAS	GINI LISA MAS PIAM EDEN PARI	GINI MAS PIAM BIB EDEN PARI RO-R RO-B	GINI LISA MAS PIAM BIB EDEN PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS		AMIC PIAM	GINI MAS	ECA	MAS
Symptoms: sneezing				MAS		MAS		MAS	MAS	MAS	BIB RHEA						ECA					AMIC		ECA	
Symptoms: runny nose				MAS		MAS		MAS	MAS	MAS	BIB RHEA		AMIC				ECA					AMIC		ECA	
Symptoms: blocked nose				MAS		MAS		MAS	MAS		BIB RHEA		AMIC				ECA					AMIC		ECA	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Month in which nose problem occurred last 12m						GINI LISA PARI		LISA	GINI LISA PARI	GINI PIAM PARI RO-R RO-B	GINI LISA MAS PIAM BIB PARI RHEA	MAS PIAM PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS
Itchy watery eyes (when no cold) last 12m				MAS		GINI LISA MAS PIAM EDEN PARI		LISA MAS	GINI LISA MAS PIAM EDEN PARI	GINI MAS PIAM EDEN PARI RO-R RO-B	BAM GINI LISA MAS PIAM BIB EDEN PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS
Doctor diagnosis allergic rhinitis ever						BAM GINI LISA EDEN PARI		LISA	AMIC BAM GINI LISA EDEN PARI	AMIC GINI PIAM EDEN PARI RO-R	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI RHEA	PIAM EDEN PARI	GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	PIAM	GINI MAS	ECA	MAS
<i>Eczema</i>																								
Itchy rash ever		PARI	PARI	ECA IN-S PARI	PARI RHEA	AMIC GINI PARI			GINI IN-S PARI	GINI PIAM BIB PARI RO-B	GINI PIAM BIB PARI RHEA	PIAM PARI	GINI LISA MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM PARI	MAS	GINI LISA MAS	MAS PIAM	MAS	MAS	PIAM	GINI MAS		MAS
Itchy rash last 12m				ECA LISA IN-S		BAM GINI LISA PIAM EDEN IN-S PARI		LISA	AMIC BAM GINI LISA PIAM EDEN IN-S PARI	AMIC GINI PIAM EDEN PARI RO-R	AMIC BAM GINI LISA PIAM BIB EDEN PARI RHEA	PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI LISA MAS		MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Affected areas by itchy rash				LISA IN-S		AMIC BAM GINI LISA PIAM EDEN IN-S PARI		LISA	AMIC BAM GINI LISA PIAM EDEN IN-S PARI	AMIC GINI PIAM BIB EDEN PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB EDEN PARI RHEA	MAS PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS		MAS
Itchy rash cleared during last 12m				LISA		GINI LISA PIAM PARI		LISA	GINI LISA PIAM PARI	GINI PIAM PARI RO-B	GINI LISA MAS PIAM BIB PARI RHEA	MAS PIAM PARI	GINI LISA MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM PARI	AMIC MAS	MAS	MAS PIAM	MAS	MAS	AMIC PIAM	GINI MAS		MAS
Sleep disturbed by itchy rash last 12m						BAM GINI LISA PIAM EDEN PARI		LISA	BAM GINI LISA PIAM EDEN PARI	GINI PIAM EDEN PARI RO-B	BAM GINI LISA PIAM BIB EDEN PARI RHEA	MAS PIAM EDEN PARI	GINI LISA MAS PIAM PARI	MAS PIAM RO-R	MAS PIAM EDEN PARI	AMIC MAS	MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS		MAS
Doctor diagnosis eczema ever				ECA LISA IN-S RO-R RO-B	RHEA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	RO-R RO-B	ECA LISA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	AMIC GINI PIAM EDEN PARI RO-R RO-B	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI RHEA	PIAM EDEN PARI	AMIC GINI LISA MAS PIAM PARI	MAS PIAM RO-R	BAM PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Other allergic related variables																								
Food hypersensitivity ever		PARI	PARI	LISA IN-S PARI RO-R	PARI RHEA	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	RO-R	LISA	AMIC BAM ECA GINI LISA PIAM BIB EDEN IN-S PARI	AMIC GINI MAS PIAM BIB EDEN PARI RO-B	BAM GINI LISA MAS PIAM BIB EDEN PARI RHEA	MAS PIAM EDEN PARI	GINI LISA PIAM PARI	PIAM RO-R	BAM PIAM EDEN PARI	MAS	ECA GINI LISA MAS	MAS PIAM	BAM MAS	MAS	AMIC PIAM	GINI LISA MAS	ECA	MAS
Urticaria ever				ECA LISA		BAM ECA GINI LISA EDEN		ECA LISA	BAM ECA GINI LISA MAS EDEN	GINI PIAM EDEN	BAM GINI LISA PIAM EDEN	PIAM EDEN	GINI LISA PIAM	PIAM	PIAM EDEN		ECA GINI LISA	PIAM	BAM		PIAM	GINI	ECA	
Allergy to drugs ever				LISA		AMIC LISA EDEN IN-S PARI		LISA	ECA LISA EDEN PARI	EDEN PARI RO-B	BIB EDEN PARI RHEA	EDEN PARI	PARI		EDEN PARI							GINI	ECA	
Anaphylaxis ever				RO-R		ECA PARI	RO-R		ECA PARI	PARI RO-R	PARI	PARI	PARI	RO-R	PARI		ECA						ECA	
Sleep quantity		MAS	MAS	BIB RO-R RO-B		MAS BIB IN-S	RO-B	MAS BIB	BIB IN-S	BIB	IN-S RHEA		AMIC			AMIC					PIAM	GINI		
Family history of allergic diseases																								
Maternal asthma ever	AMIC BAM MAS PIAM IN-S PARI RHEA RO-R RO-B			ECA LISA RO-R		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA PIAM BIB	AMIC GINI MAS PIAM BIB RO-R RO-B	AMIC GINI LISA BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC			AMIC	GINI LISA	ECA	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Age of maternal asthma onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC		AMIC				AMIC			
Maternal eczema ever	AMIC BAM MAS IN-S PARI RHEA		PIAM	ECA LISA		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA	AMIC GINI MAS BIB RO-R RO-B	AMIC GINI LISA BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC				AMIC	GINI LISA	ECA	
Age of maternal eczema onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC	ECA	AMIC				AMIC		ECA	
Maternal allergic rhinitis ever	AMIC BAM MAS PIAM IN-S PARI RHEA			ECA LISA		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA PIAM	AMIC GINI MAS PIAM BIB RO-R RO-B	AMIC GINI LISA MAS BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC				AMIC	GINI	ECA	
Age of maternal allergic rhinitis onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC		AMIC				AMIC			
Paternal asthma ever	AMIC BAM MAS PIAM IN-S PARI RHEA RO-R RO-B			ECA LISA RO-R		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA PIAM	AMIC GINI MAS PIAM BIB RO-R RO-B	AMIC GINI LISA MAS BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC				AMIC	GINI	ECA	
Age of paternal asthma onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC		AMIC				AMIC			
Paternal eczema ever	AMIC BAM MAS IN-S PARI RHEA RO-R RO-B		PIAM	ECA LISA		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA	AMIC GINI MAS BIB RO-R RO-B	AMIC GINI LISA MAS BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC				AMIC	GINI	ECA	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Age of paternal eczema onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC		AMIC				AMIC			
Paternal allergic rhinitis ever	AMIC BAM MAS PIAM IN-S PARI RHEA			ECA LISA		AMIC GINI LISA BIB EDEN		LISA	AMIC ECA GINI LISA PIAM	AMIC GINI MAS PIAM BIB RO-R RO-B	AMIC GINI LISA MAS BIB RHEA		AMIC GINI LISA		BAM	AMIC	ECA GINI LISA	AMIC				AMIC	GINI	ECA	
Age of paternal rhinitis onset	AMIC					AMIC			AMIC	AMIC MAS	AMIC BIB RHEA		AMIC			AMIC		AMIC				AMIC			
Puberty																									
Puberty – height						EDEN												AMIC	BAM		AMIC PIAM	GINI	ECA		
Puberty – body hair						EDEN										AMIC	GINI LISA MAS	AMIC MAS	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA		
Puberty – skin changes						EDEN											GINI LISA	AMIC	BAM		AMIC PIAM	GINI	ECA		
Puberty – boys: voice						EDEN											MAS	AMIC MAS	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA		
Puberty – boys: facial hair						EDEN												AMIC	BAM		AMIC PIAM	GINI	ECA		
Puberty – girls: breast growth						EDEN										AMIC	GINI LISA MAS	AMIC MAS	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA		
Puberty – girls: menstruation						EDEN										AMIC	GINI LISA MAS	AMIC MAS	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA		
Puberty – girls: menstruation started						EDEN										AMIC		AMIC	BAM		AMIC PIAM	GINI	ECA		

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
(ii) Treatment																									
<i>Treatment for allergic diseases</i>																									
Current asthma treatment				ECA	RHEA	AMIC BAM ECA LISA PIAM EDEN IN-S		ECA LISA PARI	AMIC BAM ECA LISA PIAM EDEN	AMIC GINI PIAM EDEN RO-R RO-B	BAM GINI LISA PIAM BIB EDEN IN-S RHEA	PIAM EDEN	AMIC GINI LISA PIAM	PIAM RO-R	BAM MAS PIAM EDEN PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM MAS	MAS	AMIC PIAM	GINI MAS	ECA	MAS	
Oral steroids for asthma treatment				ECA	RHEA	LISA		PARI			RHEA		AMIC				ECA					AMIC		ECA	
Inhaled steroids for asthma treatment				ECA	RHEA	BAM ECA LISA		ECA PARI	BAM ECA	PIAM	BAM BIB RHEA				PARI		ECA					AMIC		ECA	
Age of onset of inhaled steroids for asthma treatment					RHEA			PARI			BIB						ECA							ECA	
Duration of inhaled steroids use for asthma treatment					RHEA	LISA		PARI			BIB													ECA	
Alternative asthma treatment ever										PIAM	PIAM BIB RHEA	PIAM	PIAM	PIAM	BAM PIAM PARI		ECA GINI LISA	PIAM				AMIC PIAM	GINI	ECA	
Hay fever treatment					RHEA			PARI		PIAM	PIAM BIB RHEA	PIAM	PIAM	PIAM RO-R	PIAM PARI	AMIC	ECA GINI LISA	PIAM	BAM			AMIC PIAM	GINI	ECA	
Eczema treatment				ECA IN-S	RHEA	AMIC LISA		ECA PARI	AMIC BAM ECA IN-S	AMIC GINI PIAM RO-B	BAM GINI PIAM IN-S	PIAM	PIAM	PIAM	BAM PIAM PARI		ECA GINI LISA	PIAM	BAM		PIAM	GINI	ECA	MAS	
Alternative eczema treatment ever						AMIC			AMIC	AMIC RO-B	AMIC RHEA		AMIC				GINI LISA					AMIC	GINI		MAS
Immunotherapy ever											BIB IN-S RHEA			RO-R	BAM		ECA GINI LISA		BAM			AMIC PIAM	GINI	ECA	MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
<i>Doctor consultations for allergic diseases</i>																									
Hospital admission respiratory symptoms first 2y of life				ECA IN-S RO-R	RHEA	AMIC BAM ECA EDEN IN-S	RO-R	ECA PARI	AMIC BAM ECA PIAM EDEN IN-S	PIAM EDEN	BAM GINI PIAM EDEN IN-S	PIAM EDEN	PIAM	PIAM	BAM PIAM EDEN	AMIC	ECA		BAM					ECA	
Breathing difficulties n° Dr consultations last 12m				ECA BIB RO-R		ECA BIB	RO-R	ECA BIB PARI	ECA BIB	RO-R	BAM GINI RHEA			RO-R	BAM MAS	AMIC MAS	ECA MAS		BAM MAS	MAS	AMIC	MAS	ECA		
Food reaction n° Dr consultations last 12m				ECA		ECA PARI		ECA	ECA PARI	PARI	GINI BIB PARI RHEA	PARI	PARI		PARI		ECA		BAM				ECA		
Drug reaction n° Dr consultations last 12m						ECA		ECA	ECA		GINI BIB RHEA						ECA						ECA		
Vaccination reaction n° Dr consultations last 12m						ECA		ECA	ECA		BIB RHEA						ECA						ECA		
<i>Triggers of allergic diseases in the last 12 months</i>																									
Triggers wheezing: weather						ECA PARI		ECA LISA	ECA LISA PARI	GINI PARI	AMIC GINI BIB IN-S PARI RHEA	PARI	AMIC PARI		BAM PARI		ECA		BAM					ECA	
Triggers wheezing: pollen						BAM PARI		LISA	BAM LISA PARI	GINI PIAM PARI	BAM GINI MAS PIAM BIB IN-S PARI RHEA	MAS PIAM PARI	AMIC PIAM PARI	PIAM RO-R	BAM PIAM PARI		ECA	PIAM	BAM			PIAM		ECA	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Triggers wheezing: gas, vapors, fumes						PARI			PARI	PARI	AMIC BIB IN-S PARI RHEA	PARI	AMIC PARI		BAM PARI		ECA		BAM					ECA	
Triggers wheezing: dust						PARI			PARI	PIAM PARI	AMIC PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC PIAM PARI	PIAM RO-R	PIAM PARI			PIAM				PIAM			
Triggers wheezing: pet						BAM LISA PARI		LISA	BAM LISA PARI	GINI PIAM PARI	AMIC BAM GINI MAS BIB IN-S PARI RHEA	MAS PARI	AMIC PARI	RO-R	BAM PARI		ECA		BAM					ECA	
Triggers wheezing: cold, flu				LISA		AMIC ECA LISA PARI		ECA LISA	AMIC ECA LISA PARI	AMIC PIAM PARI	AMIC LISA PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC PIAM PARI	PIAM RO-R	PIAM PARI		ECA	PIAM				PIAM		ECA	
Triggers wheezing: tobacco smoke						PARI		LISA	LISA PARI	GINI PIAM PARI	GINI PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC PIAM PARI	PIAM RO-R	BAM PIAM PARI		ECA	PIAM	BAM			PIAM		ECA	
Triggers wheezing: emotion, stress						ECA PARI		ECA	ECA PARI	PARI	MAS BIB PARI RHEA	MAS PARI	AMIC PARI		BAM PARI				BAM						

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y		
Triggers wheezing: tears, laughter, excitation				ECA		BAM ECA GINI LISA PARI		ECA LISA	AMIC BAM ECA GINI LISA PARI	AMIC GINI PARI	AMIC BAM GINI BIB IN-S PARI RHEA	PARI	AMIC PARI		PARI											
Triggers wheezing: wool clothes						PARI			PARI	PARI	BIB IN-S PARI RHEA	PARI	AMIC PARI		PARI											
Triggers wheezing: food or drink						GINI LISA PARI		LISA	GINI LISA PARI	GINI PARI	GINI MAS BIB IN-S PARI RHEA	MAS PARI	AMIC PARI	RO-R	BAM PARI		ECA		BAM					ECA		
Triggers wheezing: soap, spray						PARI			PARI	PARI	AMIC BIB IN-S PARI RHEA	PARI	AMIC PARI	RO-R	PARI											
Triggers wheezing: odors						PARI			PARI	PARI	BIB PARI RHEA	PARI	AMIC PARI		BAM PARI		ECA		BAM					ECA		
Triggers wheezing: exercise						ECA PARI		ECA LISA	ECA LISA PARI	AMIC GINI PARI	AMIC GINI LISA BIB IN-S PARI RHEA	PARI	AMIC GINI LISA PARI	RO-R	BAM PARI	AMIC	ECA GINI LISA		BAM			AMIC	GINI	ECA		
Triggers rhinitis: animals, dust, mites						BAM PIAM PARI		LISA	BAM LISA PARI	GINI PARI	AMIC BAM GINI MAS BIB PARI RHEA	MAS PARI	AMIC LISA PARI		BAM PARI		ECA		BAM			AMIC		ECA		

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Triggers rhinitis: grass, trees, flowers						BAM PIAM PARI		LISA	BAM LISA PARI	GINI PARI	BAM GINI MAS BIB PARI RHEA	MAS PARI	LISA PARI		BAM PARI		ECA		BAM		AMIC		ECA	
Triggers rhinitis: tobacco smoke											BIB RHEA				BAM				BAM		AMIC			
Triggers rhinitis: house dust						PARI			PARI	PARI	BIB PARI	PARI	PARI		PARI		ECA				AMIC		ECA	
Triggers rhinitis: air pollutants						PARI			PARI	PARI	BIB PARI RHEA	PARI	PARI		BAM PARI		ECA		BAM		AMIC		ECA	
<i>School or outdoor activities absenteeism due to allergic diseases in the last 12 months</i>																								
Absenteeism due nasal allergy: sleep																			BAM		AMIC			
Absenteeism due nasal allergy: school homework											LISA						AMIC		BAM		AMIC			
Absenteeism due nasal allergy: outdoor activities						GINI			GINI	GINI	BAM GINI		GINI LISA			AMIC MAS	GINI LISA		BAM	MAS	AMIC	GINI		
Absenteeism due nasal allergy: any activity						LISA					BAM LISA		LISA			AMIC	LISA		BAM		AMIC	LISA		

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
(iii) Environmental exposures																									
<i>Indoor exposures</i>																									
Gas cooking	AMIC BAM IN-S RO-R RO-B		MAS PIAM	LISA RO-R		AMIC GINI LISA PIAM BIB EDEN IN-S PARI			AMIC GINI PIAM BIB EDEN IN-S PARI	AMIC PIAM BIB EDEN PARI RO-R RO-B	AMIC LISA PIAM BIB IN-S PARI	PIAM PARI	AMIC GINI LISA PIAM PARI	PIAM	BAM PIAM PARI		GINI LISA	PIAM				AMIC PIAM	GINI		
Dampness	BAM IN-S RO-R RO-B	PARI	MAS	ECA LISA RO-R		GINI BIB EDEN IN-S			AMIC GINI BIB EDEN IN-S	BIB EDEN RO-R	LISA BIB IN-S RHEA	GINI LISA		BAM			ECA GINI LISA		BAM			AMIC	GINI	ECA	
Molds in the dwelling	BAM IN-S RHEA RO-R RO-B	PARI	MAS PIAM	LISA RO-R	RHEA	GINI LISA PIAM BIB EDEN			AMIC GINI PIAM BIB EDEN IN-S	PIAM BIB EDEN RO-B	LISA PIAM BIB IN-S RHEA	PIAM	GINI LISA PIAM	PIAM	BAM PIAM	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM			AMIC PIAM	GINI	ECA	MAS
Molds in child bedroom	IN-S RO-R RO-B	PARI	PIAM	RO-R RO-B		PIAM EDEN	RO-B		AMIC PIAM EDEN IN-S	AMIC PIAM EDEN RO-B	AMIC LISA PIAM BIB IN-S RHEA	PIAM	AMIC LISA PIAM	PIAM	BAM PIAM		ECA LISA	PIAM				AMIC PIAM	MAS	ECA	MAS
Molds in rest of flat	IN-S RO-R RO-B	PARI	PIAM	RO-R RO-B		PIAM EDEN	RO-B		AMIC PIAM EDEN IN-S	PIAM EDEN IN-S RO-B	LISA PIAM BIB IN-S RHEA	PIAM	LISA PIAM	PIAM	BAM PIAM		ECA GINI LISA	PIAM				AMIC PIAM		ECA	MAS
Molds in basement	RO-R RO-B	PARI	PIAM	RO-R RO-B		PIAM	RO-B		PIAM	PIAM RO-B	LISA PIAM BIB RHEA	PIAM	LISA PIAM	PIAM	PIAM		ECA GINI LISA	PIAM				AMIC PIAM		ECA	MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Pets	AMIC BAM IN-S RHEA RO-B		MAS PIAM	ECA LISA RO-R RO-B	RHEA	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI	RO-R RO-B	LISA BIB	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM BIB PARI RO-R RO-B	AMIC BAM GINI LISA PIAM IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM RO-R	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		PIAM	GINI	ECA	MAS
Dog	AMIC BAM IN-S RHEA RO-B		MAS PIAM	ECA LISA RO-R RO-B	RHEA	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI	RO-R RO-B	LISA BIB	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM BIB PARI RO-R RO-B	AMIC BAM GINI LISA PIAM IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM RO-R	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		PIAM	GINI	ECA	MAS
Cat	AMIC BAM IN-S RHEA RO-B		MAS PIAM	ECA LISA RO-R RO-B	RHEA	AMIC BAM GINI LISA PIAM BIB EDEN IN-S PARI	RO-R RO-B	LISA BIB	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM BIB PARI RO-R RO-B	AMIC BAM GINI LISA PIAM IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM RO-R	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		PIAM	GINI	ECA	MAS
Smoking exposures																								
Pregnancy: maternal smoking	AMIC BAM MAS PIAM IN-S PARI RO-R RO-B	MAS		ECA LISA BIB RO-R	RHEA	AMIC GINI LISA PIAM BIB EDEN		LISA BIB	AMIC GINI LISA PIAM BIB	AMIC GINI PIAM BIB	AMIC GINI LISA RHEA		AMIC GINI LISA			AMIC	ECA GINI LISA		BAM		AMIC	GINI		

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Pregnancy: maternal smoking, n°	AMIC BAM MAS PIAM RO-R RO-B					GINI																			
Pregnancy, 1 st term: maternal smoking	AMIC BAM MAS PIAM IN-S RO-R RO-B					GINI																			
Pregnancy, 1 st term: maternal smoking, n°	AMIC BAM MAS PIAM RO-R RO-B					GINI																			
Pregnancy, 2 nd term: maternal smoking	AMIC BAM MAS PIAM RO-R RO-B					GINI																			
Pregnancy, 2 nd term: maternal smoking, n°	AMIC BAM MAS PIAM RO-R RO-B					GINI																			
Pregnancy, 3 rd term: maternal smoking	AMIC BAM MAS PIAM IN-S RO-R RO-B					GINI																			

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Pregnancy, 3 rd term: maternal smoking, n°	AMIC BAM MAS PIAM RO-R RO-B					GINI																			
Pregnancy: paternal smoking	AMIC MAS IN-S RO-R RO-B			ECA RO-R	RHEA	AMIC LISA PIAM EDEN		LISA	AMIC LISA PIAM	AMIC PIAM	AMIC LISA RHEA		AMIC LISA			AMIC	ECA LISA		BAM		AMIC				
Pregnancy: paternal smoking, n°	AMIC MAS IN-S																								
Maternal smoking indoors	BAM	MAS	PIAM	ECA LISA RO-R RO-B	RHEA	AMIC BAM ECA GINI LISA PIAM IN-S PARI	RO-R RO-B	LISA MAS	AMIC BAM ECA LISA PIAM IN-S PARI	AMIC MAS PIAM PARI RO-B	AMIC BAM LISA MAS PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		AMIC PIAM	GINI	ECA	MAS	
Maternal smoking indoors, n° occasional	BAM			ECA		ECA IN-S			ECA		LISA BIB RHEA		LISA				LISA					AMIC	GINI	ECA	
Maternal smoking indoors, n° regular	BAM	MAS	PIAM	ECA	RHEA	AMIC BAM ECA GINI LISA PIAM EDEN PARI		LISA MAS	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	AMIC GINI MAS PIAM EDEN PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB EDEN IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM	BAM PIAM PARI	MAS	ECA GINI LISA MAS	PIAM	BAM		AMIC PIAM	GINI	ECA		

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Paternal smoking indoors	BAM	MAS	PIAM	ECA LISA RO-R RO-B	RHEA	AMIC BAM ECA LISA PIAM IN-S PARI	RO-R RO-B	LISA MAS	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		AMIC PIAM	GINI	ECA	MAS
Paternal smoking indoors, n° occasional	BAM			ECA		ECA			ECA		BIB RHEA										AMIC		ECA	
Paternal smoking indoors, n° regular	BAM	MAS	PIAM	ECA LISA	RHEA	AMIC BAM ECA GINI LISA PIAM EDEN PARI		LISA MAS	AMIC BAM ECA GINI LISA PIAM EDEN IN-S PARI	AMIC GINI MAS PIAM EDEN PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB EDEN IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM	BAM PIAM PARI	MAS	ECA GINI LISA MAS	PIAM	BAM		AMIC PIAM	GINI LISA	ECA	
Others smoking indoors	AMIC BAM IN-S RHEA RO-B	MAS	PIAM	ECA LISA RO-R RO-B	RHEA	AMIC ECA GINI LISA PIAM IN-S PARI	RO-R RO-B	LISA MAS	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM PARI RO-R RO-B	AMIC BAM GINI LISA MAS PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM RO-R	BAM PIAM PARI	AMIC MAS	ECA GINI LISA MAS	PIAM	BAM		AMIC PIAM	GINI	ECA	MAS
Others smoking indoors, n° occasional				ECA		ECA			ECA		BIB RHEA										AMIC		ECA	

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Others smoking indoors, n° regular	AMIC BAM RO-R RO-B	MAS	PIAM	ECA	RHEA	AMIC ECA LISA PIAM PARI		LISA MAS	AMIC BAM ECA GINI LISA PIAM IN-S PARI	AMIC GINI MAS PIAM PARI	AMIC BAM GINI LISA MAS PIAM BIB IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PIAM PARI	MAS PIAM	BAM PIAM PARI	MAS	GINI LISA MAS	PIAM				AMIC PIAM	GINI		
(iv) Sociodemographic																									
Parity at birth	AMIC BAM MAS IN-S PARI RHEA RO-R RO-B		PIAM	ECA LISA RO-R	RHEA	GINI LISA EDEN		LISA BIB	GINI LISA	GINI	GINI LISA RHEA		GINI LISA				GINI LISA						GINI		
Other children at home	AMIC BAM MAS IN-S PARI RHEA RO-B		PIAM	ECA BIB RO-R RO-B	RHEA	AMIC ECA GINI BIB IN-S PARI	RO-R RO-B	ECA MAS BIB	AMIC GINI BIB IN-S PARI	AMIC GINI BIB PARI RO-R RO-B	AMIC GINI LISA IN-S PARI RHEA	PIAM PARI	AMIC GINI LISA PARI	RO-R	PARI	AMIC	ECA GINI LISA					GINI	ECA		
Country of birth: mother	AMIC IN-S PARI RHEA RO-R RO-B			BIB					PIAM						BAM										
Country of birth: father	AMIC IN-S PARI RO-R RO-B			BIB					PIAM						BAM										
Ethnicity: mother	AMIC IN-S PARI RHEA			BIB					PIAM																

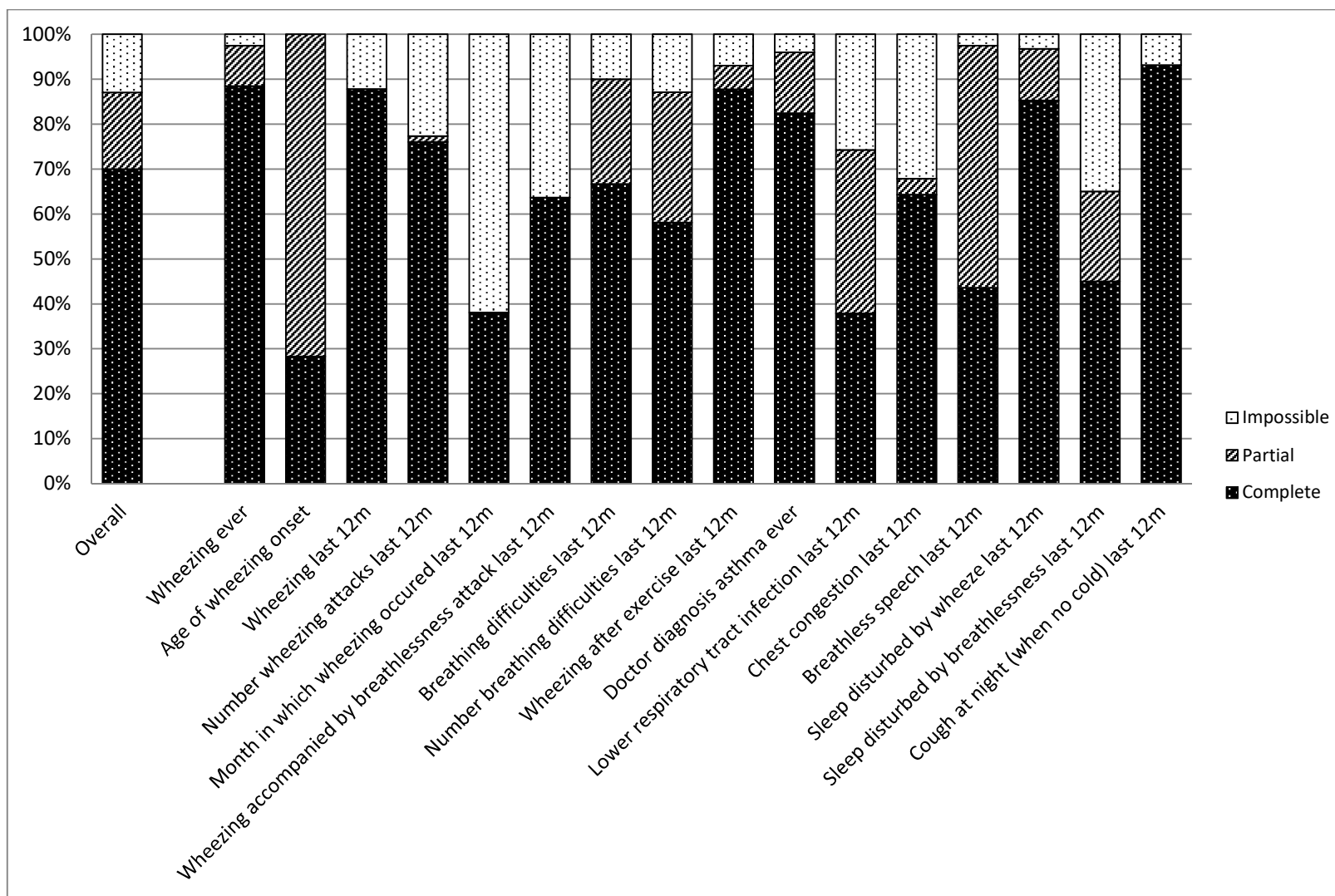
Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y	
Ethnicity: father	AMIC MAS IN-S PARI RHEA								PIAM																
Educational level: mother	AMIC BAM MAS IN-S PARI RHEA RO-R RO-B			BIB		GINI LISA PIAM		MAS	GINI LISA		RHEA		GINI LISA				ECA					GINI	ECA	MAS	
Educational level: father	AMIC BAM MAS IN-S PARI RHEA RO-R RO-B			BIB		GINI LISA PIAM		MAS	GINI LISA		RHEA		GINI LISA				ECA					GINI	ECA	MAS	
(v) Physical activity																									
Watch TV during week				BIB RO-B		BIB	RO-R RO-B	BIB	GINI BIB IN-S	BIB RO-R	BIB IN-S RHEA	PIAM EDEN	AMIC	PIAM RO-R	PIAM EDEN	AMIC	ECA GINI LISA	PIAM	BAM			AMIC PIAM	GINI	ECA	MAS
Watch TV weekend				BIB		BIB	RO-R RO-B	BIB	GINI BIB IN-S	BIB RO-R	LISA BIB IN-S RHEA	EDEN	AMIC LISA	RO-R	EDEN	AMIC	ECA GINI LISA MAS		BAM			AMIC	GINI	ECA	
Vigorous activities summer									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA					AMIC	GINI LISA	ECA	MAS
Vigorous activities winter									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA					AMIC	GINI LISA	ECA	MAS
Moderate activities summer									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA					AMIC	GINI LISA	ECA	MAS
Moderate activities winter									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA					AMIC	GINI LISA	ECA	MAS

Dimension and candidate variables	Preg	1 m	3 m	6 m	9 m	1 y	15 m	18 m	2 y	3 y	4 y	5 y	6 y	7 y	8 y	9 y	10 y	11 y	12 y	13 y	14 y	15 y	16 y	20 y
Light activities summer									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA				AMIC	GINI LISA	ECA	MAS
Light activities winter									GINI IN-S	BIB	IN-S RHEA	PIAM EDEN	AMIC	PIAM	PIAM EDEN	AMIC	ECA GINI LISA				AMIC	GINI LISA	ECA	MAS

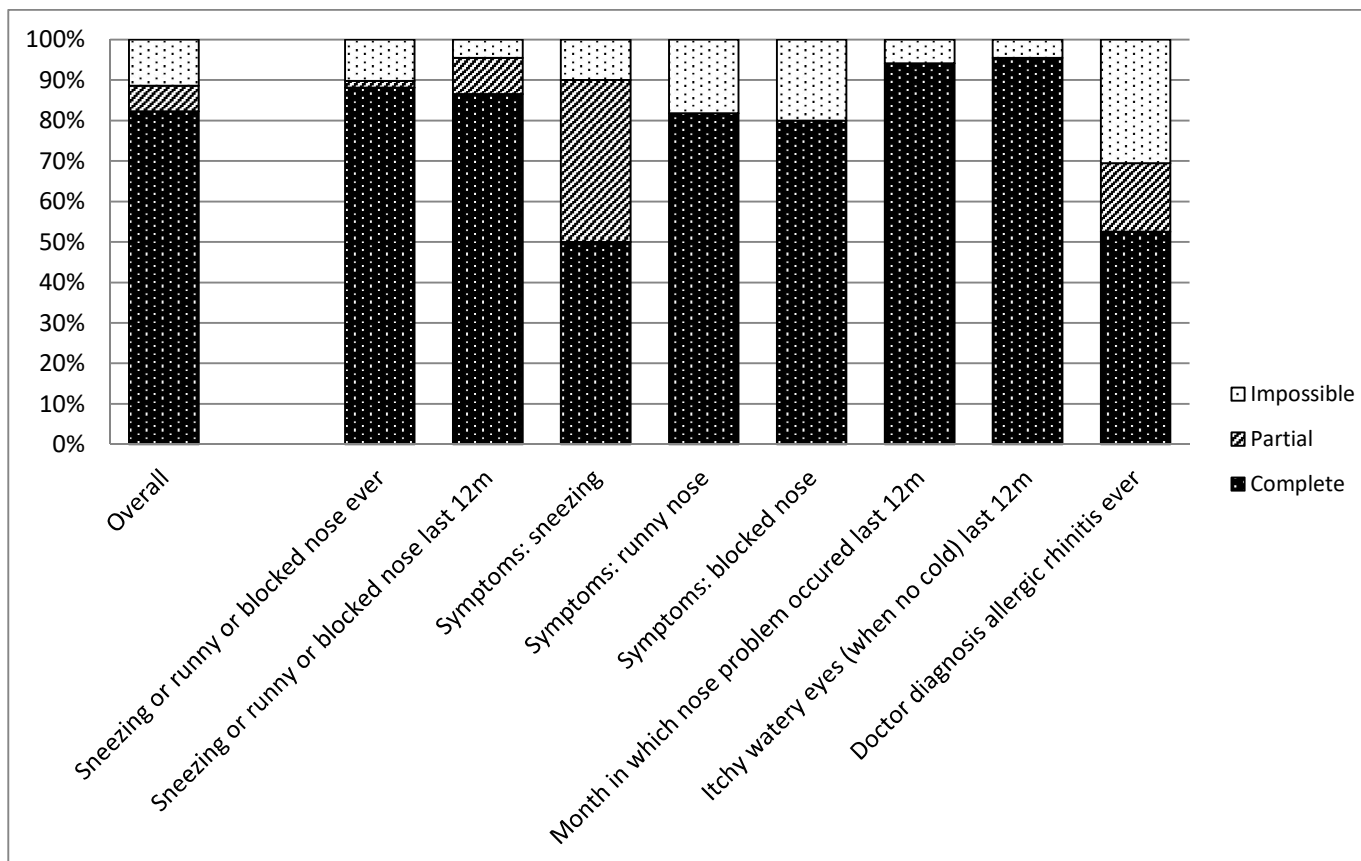
Abbreviations: Preg for pregnancy; m for month, y for years; AMIC for AMICS-Menorca, Asthma Multicenter Infants Cohort Study; BAM for BAMSE study, Children Allergy, Milieu, Stockholm, Epidemiology study; BIB for Born in Bradford; ECA for Environment and Childhood Asthma study in Oslo; EDEN, for Study of the determinants pre and postnatal of child health and development; GINI for GINIplus, German Infant Study on the influence of Nutrition Intervention PLUS environmental and genetic influences on allergy development; IN-S for INMA Sabadell, Environmental and childhood Project – Sabadell; LISA for LISApplus, Influence of life-style factors on the development of the immune system and allergies in East and West Germany Plus the influence of traffic emissions and genetics; MAS for Multicenter Allergy Study; PARI for PARIS, Pollution and Asthma Risk: An Infant Study; PIAM for PIAMA, Prevention and Incidence of Asthma and Mite Allergy; RHEA for Mother-child cohort in Crete; RO-R for ROBBIC–Roma, Roma and Bologna Birth Italian Cohorts – Roma; RO-B for ROBBIC–Bologna, Roma and Bologna Birth Italian Cohorts – Bologna.

Green color for complete inferential equivalence classification; Orange color for partial inferential equivalence classification; Red color for impossible inferential equivalence classification.

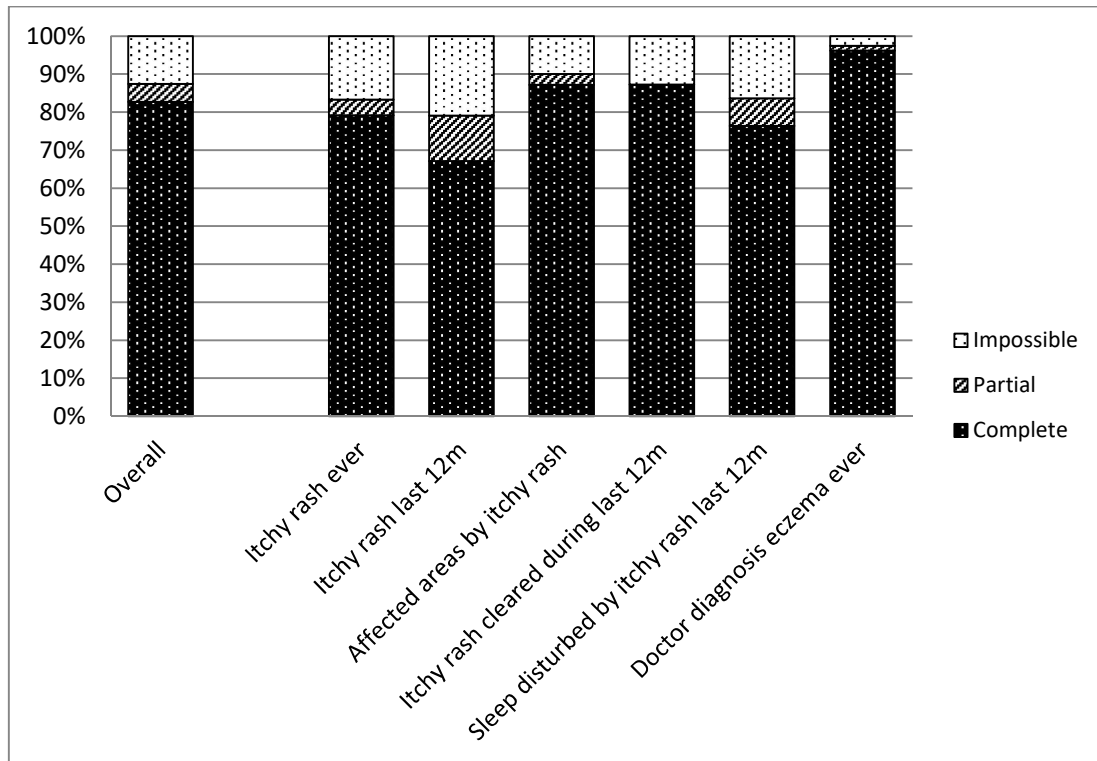
Web Figure 1: Distribution of Inferential Equivalence Classification of 'Asthma and Wheezing' Variables to Reference Definitions, Overall and Individually



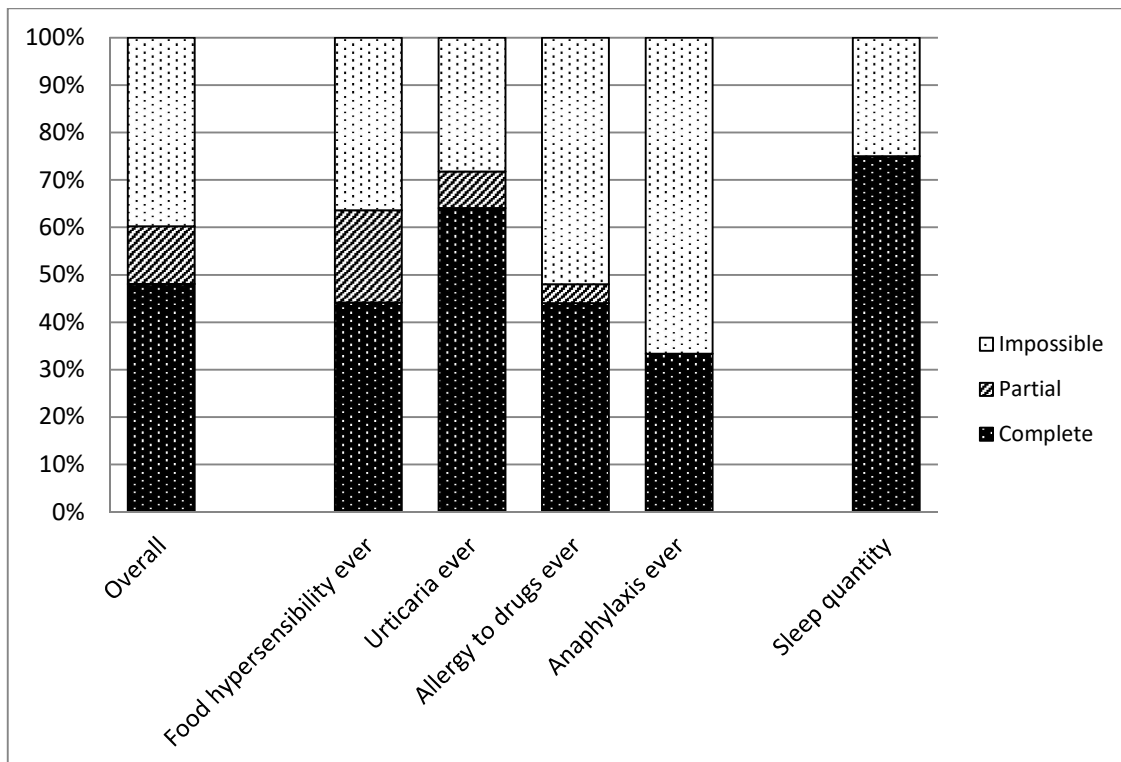
Web Figure 2: Distribution of Inferential Equivalence Classification of 'Rhinitis' Variables to Reference Definitions, Overall and Individually



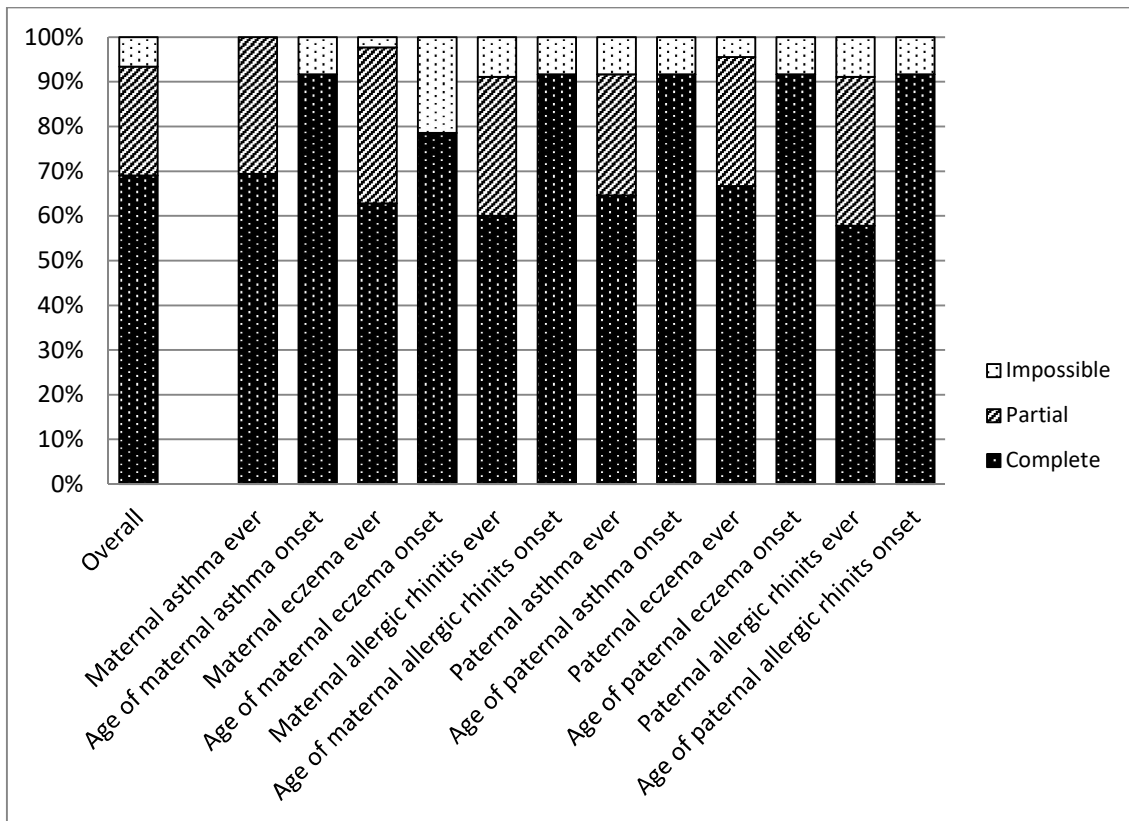
Web Figure 3: Distribution of Inferential Equivalence Classification of 'Eczema' Variables to Reference Definitions, Overall and Individually



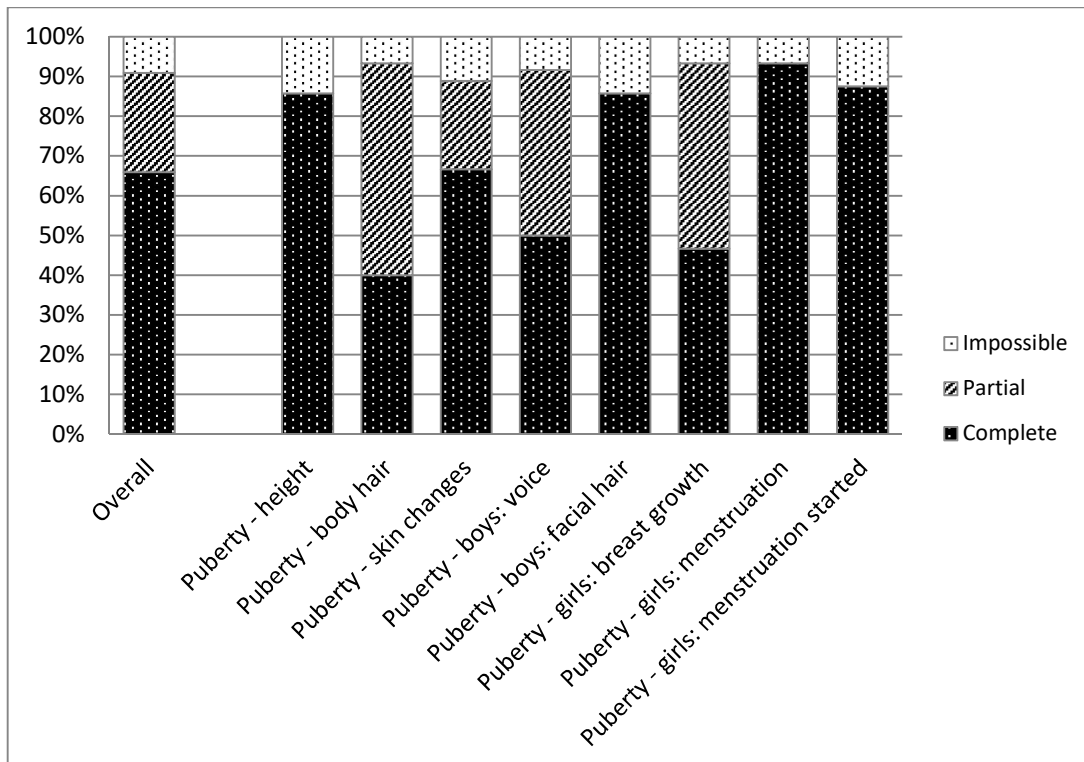
Web Figure 4: Distribution of Inferential Equivalence Classification of 'Sleep Quantity and Other Allergic Related' Variables to Reference Definitions, Overall and Individually



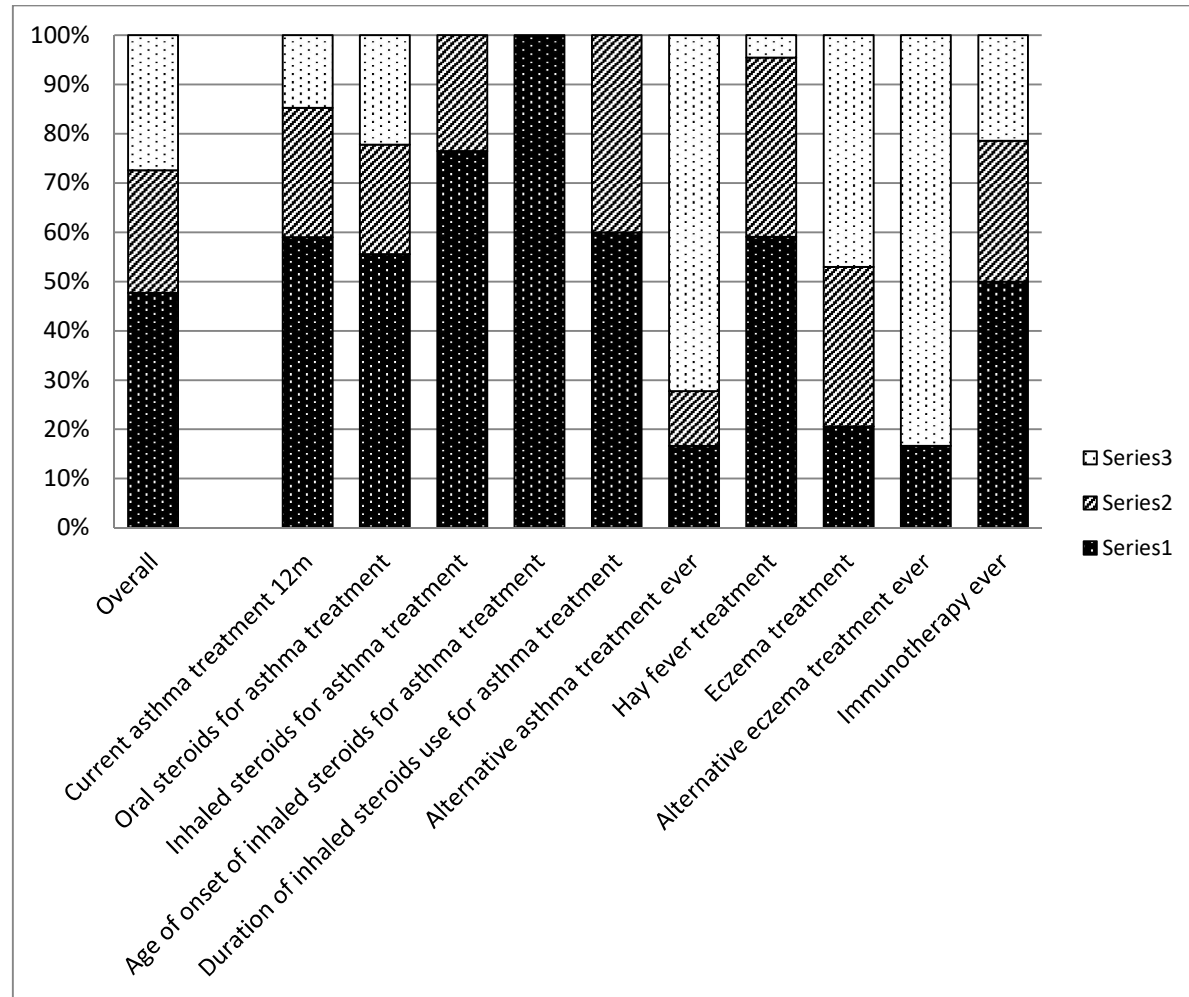
Web Figure 5: Distribution of Inferential Equivalence Classification of 'Family History of Allergic Diseases' Variables to Reference Definitions, Overall and Individually



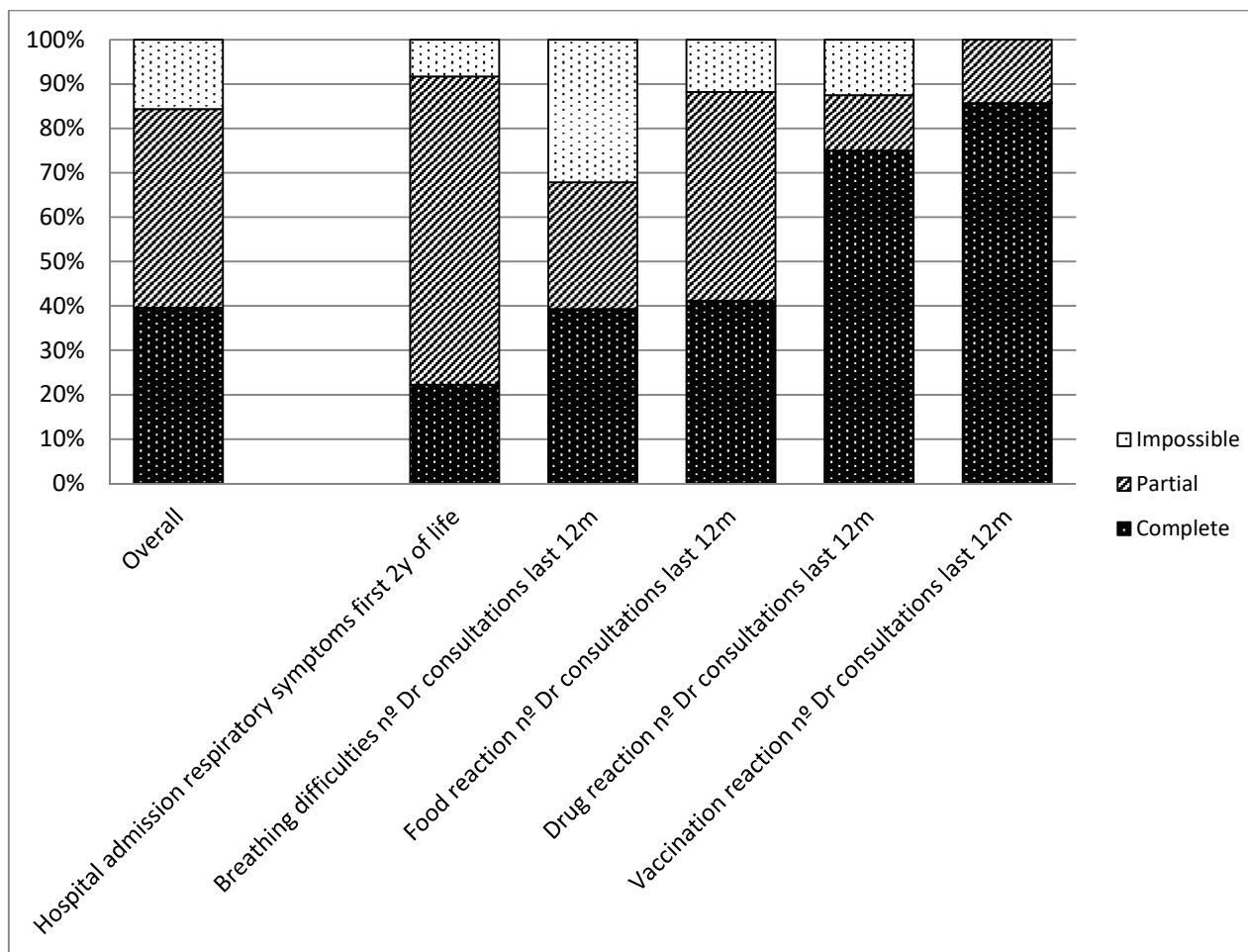
Web Figure 6: Distribution of Inferential Equivalence Classification of 'Puberty' Variables to Reference Definitions, Overall and Individually



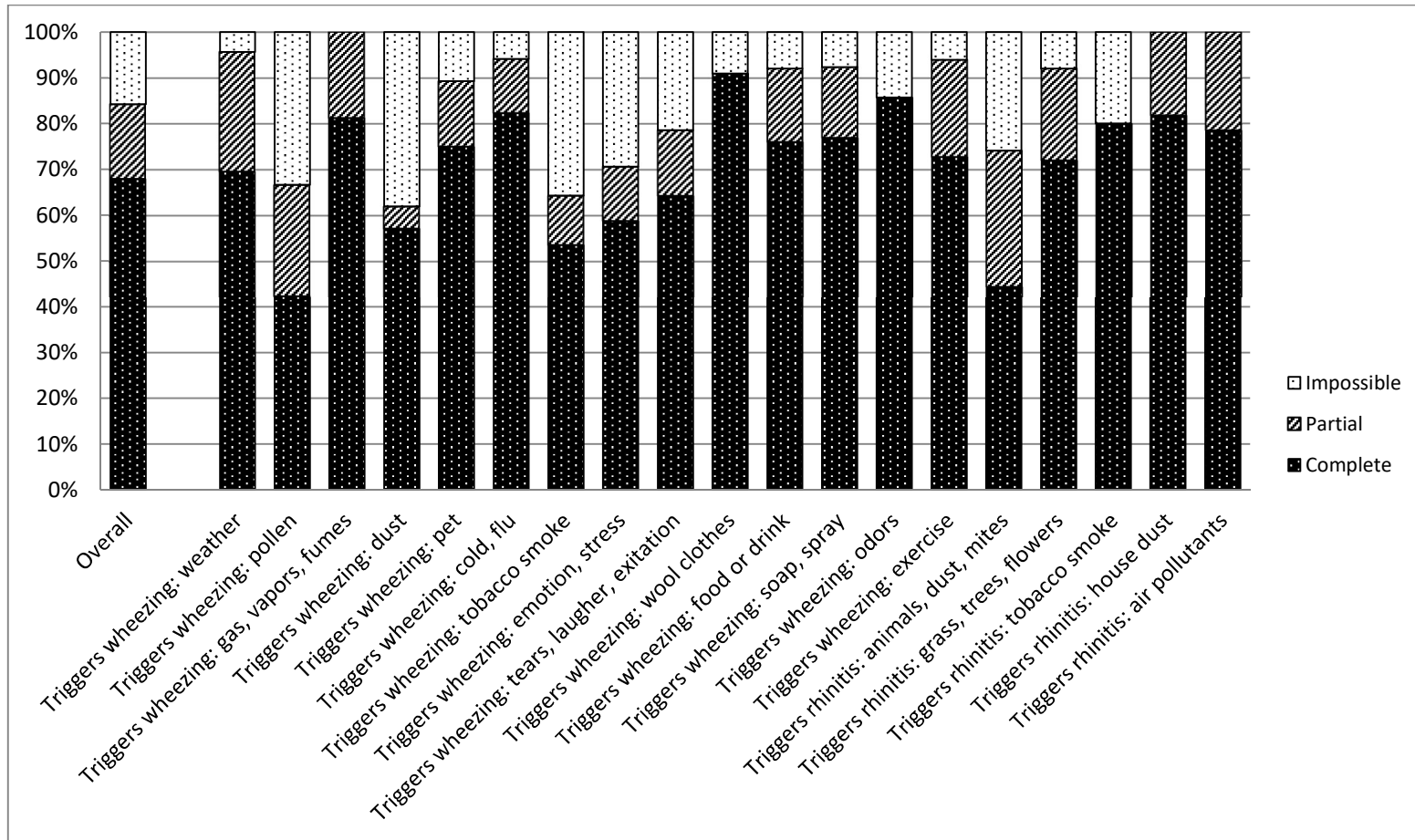
Web Figure 7: Distribution of Inferential Equivalence Classification of 'Treatment for Allergic Diseases in the Last 12 Months' Variables to Reference Definitions, Overall and Individually



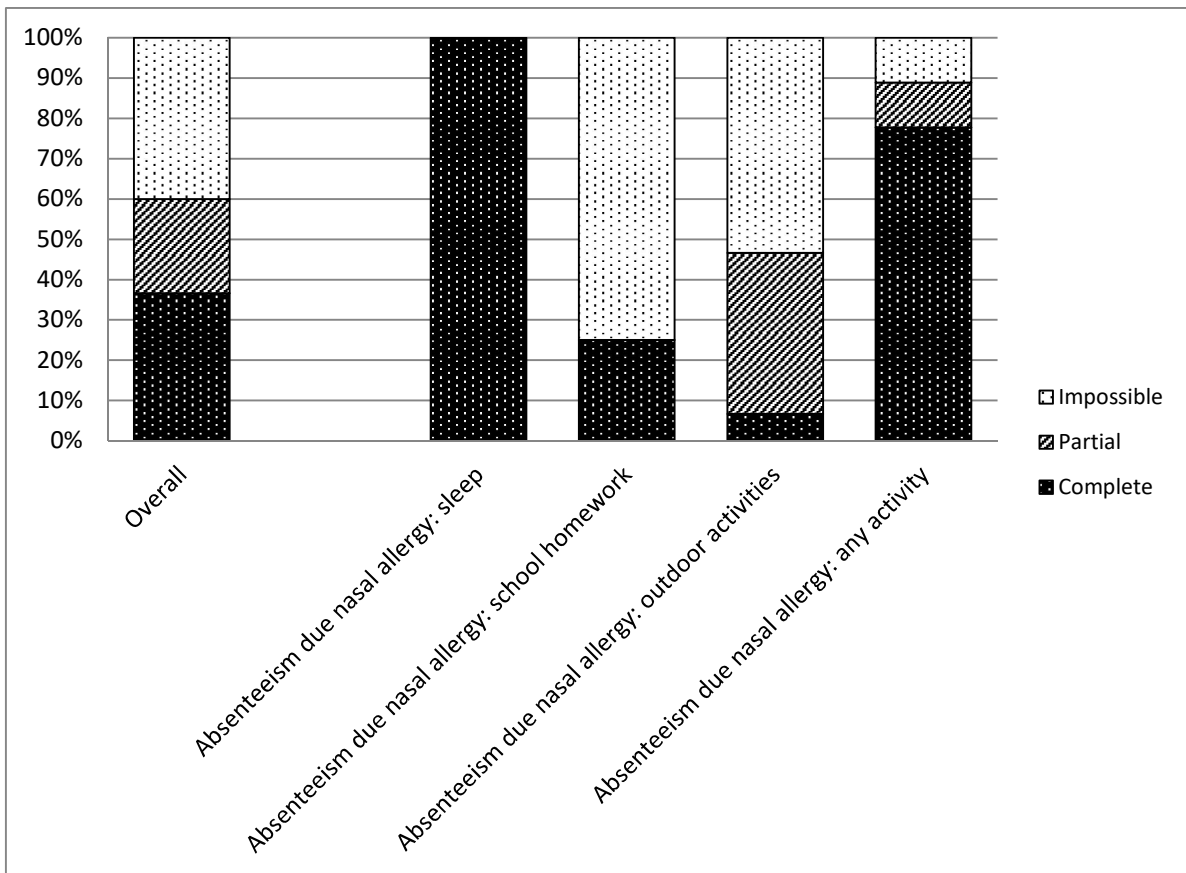
Web Figure 8: Distribution of Inferential Equivalence Classification of 'Doctor Consultations for Allergic Diseases' Variables to Reference Definitions, Overall and Individually



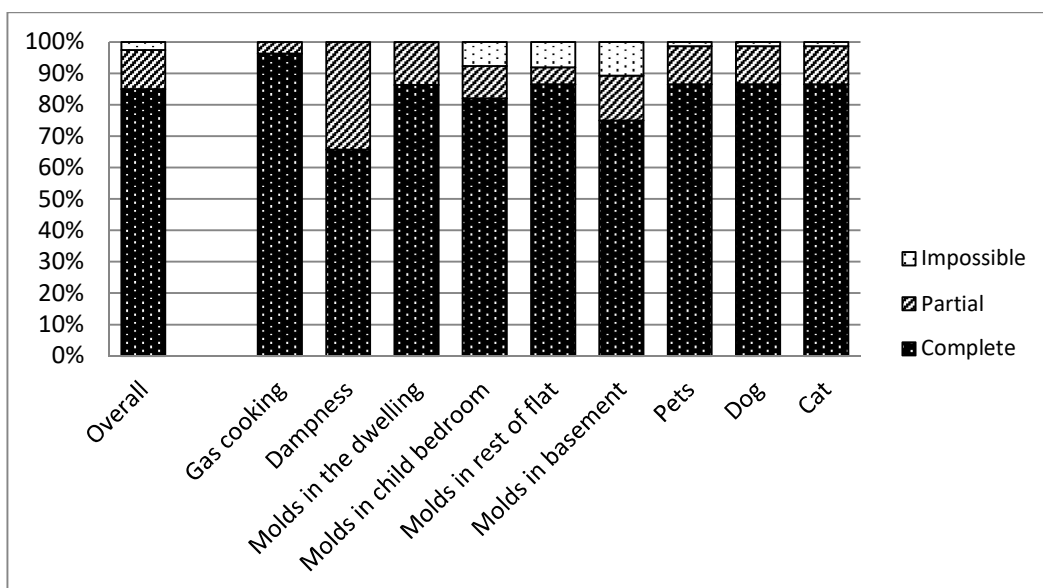
Web Figure 9: Distribution of Inferential Equivalence Classification of 'Triggers of Allergic Diseases in the Last 12 months' Variables to Reference Definitions, Overall and Individually



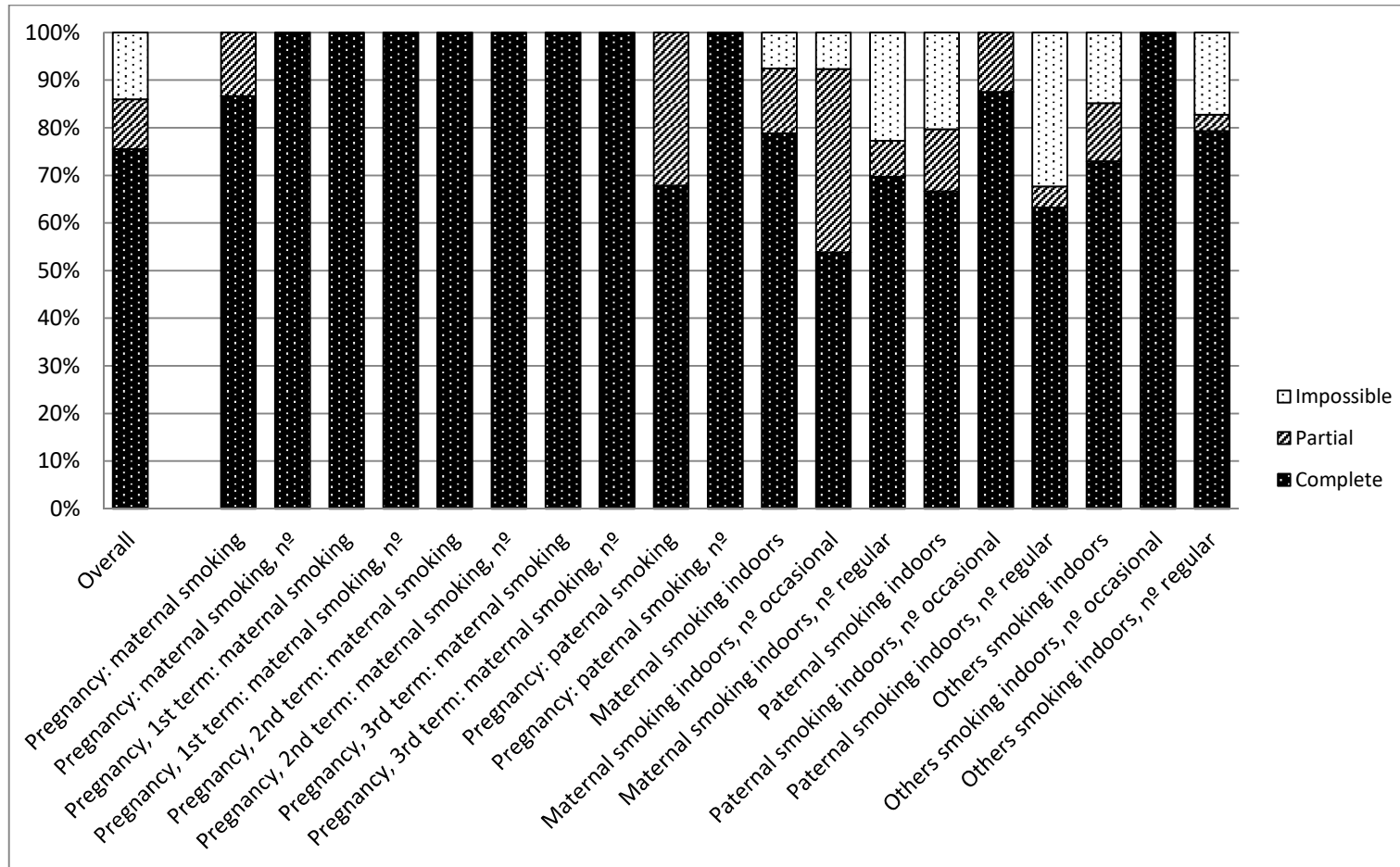
Web Figure 10: Distribution of Inferential Equivalence Classification of ‘School or Outdoor Activities Absenteeism due to Allergic Diseases in the Last 12 Months’ Variables to Reference Definitions, Overall and Individually



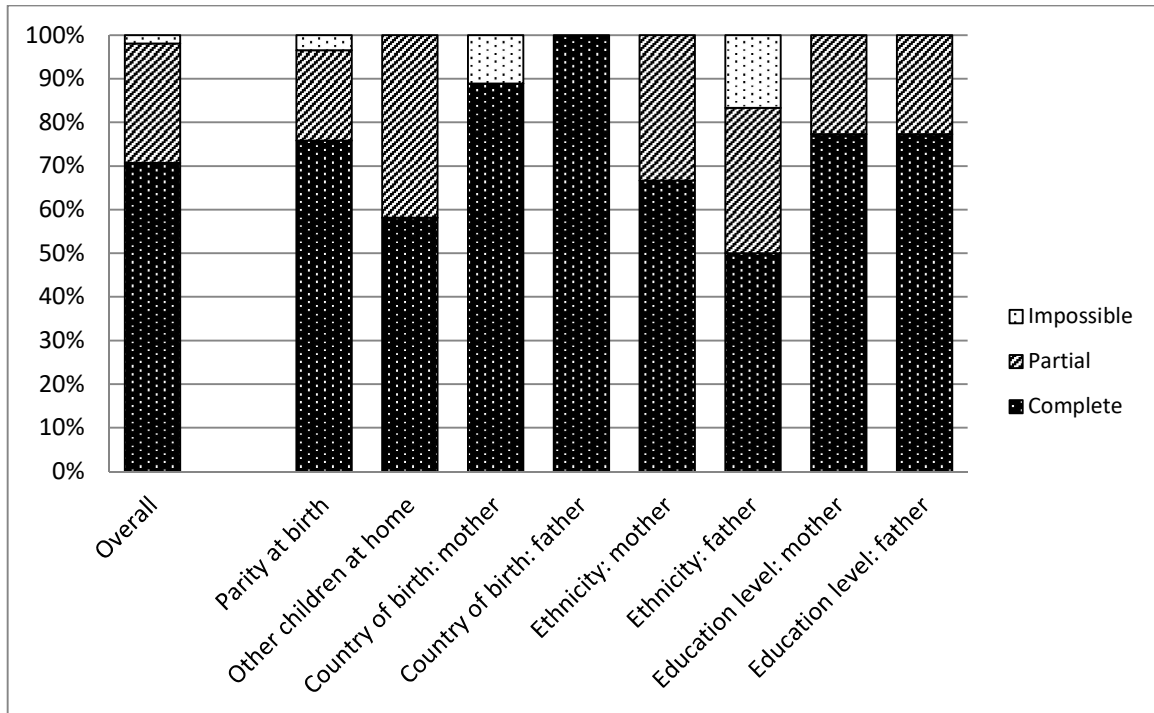
Web Figure 11: Distribution of Inferential Equivalence Classification of ‘Indoor Exposures’ Variables to Reference Definitions, Overall and Individually



Web Figure 12: Distribution of Inferential Equivalence Classification of 'Smoking Exposures' Variables to Reference Definitions, Overall and Individually



Web Figure 13: Distribution of Inferential Equivalence Classification of ‘Sociodemographic’ Variables to Reference Definitions, Overall and Individually



Web Figure 14: Distribution of Inferential Equivalence Classification of ‘Physical Activity’ Variables to Reference Definitions, Overall and Individually

