

SUPPLEMENTARY MATERIAL

Supplementary Tables

Supplementary Table S1 – Clinical presentation and sensitization profiles of the patient and the controls

| Subj. | Clinical presentation | Total IgE (IU/ml) | Cow's milk sIgE | | | | | Sheep's milk sIgE | | Goat's milk sIgE |
|-------|---|-------------------|------------------|-------------|-------------------------------|--------------------------------|----------------|----------------------|--------------------|---------------------|
| | | | Cow milk (kUA/l) | BSA (kUA/l) | α -lactalbumin (kUA/l) | β -lactoglobulin (kUA/l) | Casein (kUA/l) | Sheep's milk (kUA/l) | Sheep whey (kUA/l) | Goat's milk (kUA/l) |
| #1 | Severe anaphylaxis to GSM, no CM allergy | 100 | 0.19 | <0.10 | 0.16 | 0.11 | <0.10 | 0.76 | 0.74 | 0.53 |
| #2 | Severe anaphylaxis to CM and GSM | 161 | 0.73 | <0.10 | <0.10 | <0.10 | 1.47 | 27.7 | ND | 39.6 |
| #3 | CM allergy, GSM allergy not reported | 302 | 7.1 | <0.10 | 2.8 | 4.07 | 1.78 | 2.18 | ND | 1.37 |
| #4 | No milk allergy, but sensitization to BSA | 124 | 0.83 | 1.74 | <0.10 | <0.10 | <0.10 | <0.10 | ND | <0.10 |

Supplementary Table S2 – Literature Review: Adult patients (>18 years) with isolated GSM allergy

| Age, Sex | Allergen | Tolerated | SPT | IgE (or RAST) | WB using GM and/or SM | Reaction | Atopy | Ref |
|----------|----------|------------|------------------------------|------------------|---|----------|---------|-----|
| 39, m | GC, SC | CM | GM+, GC+, SM+, SC+, CM-, CC- | GM+, SM+ | κ -casein (18kD) whey protein | U, A, H | ARC | * |
| 27, f | GC | CM, CC, SC | GM+, GC+, CM- | GM-, CM- | α -Lactalbumin (14kD) | U | AA, ARC | [1] |
| 25, m | GC, SC | CC | CM-, GM+ | GC+ SC + | n/a # | U, A, R | no | [2] |
| 43, m | SM, SC | CM | SM+, SC+, GM+, CM- | SM+, GM+, CM- | α - or β -casein (25kD) | G, R, H | no | [3] |
| 55, f | GC | n/a | n/a | GM+ | β - or γ -casein (20-28kD) | U, A, R | AD, AA | [4] |
| 25, f | SC | CM, CC | SM+, SC+, GM+, CM- | SM+, CM- | α -S2 casein | A, G | AA, AD | [5] |

*= this report. A= angioedema; AA= allergic asthma; AD= atopic dermatitis; ARC= allergic rhinoconjunctivitis; CC= cow cheese; CM= cow milk; f= female; G= gastrointestinal; GC= goat cheese; GM= goat milk; H= hypotension; m= male; n/a= not available/reported; neg.= negative; R= respiratory; SC= sheep cheese; SM= sheep milk; U= urticaria; WB= Western Blot/Immunoblot. #= goat and sheep casein positive in RAST