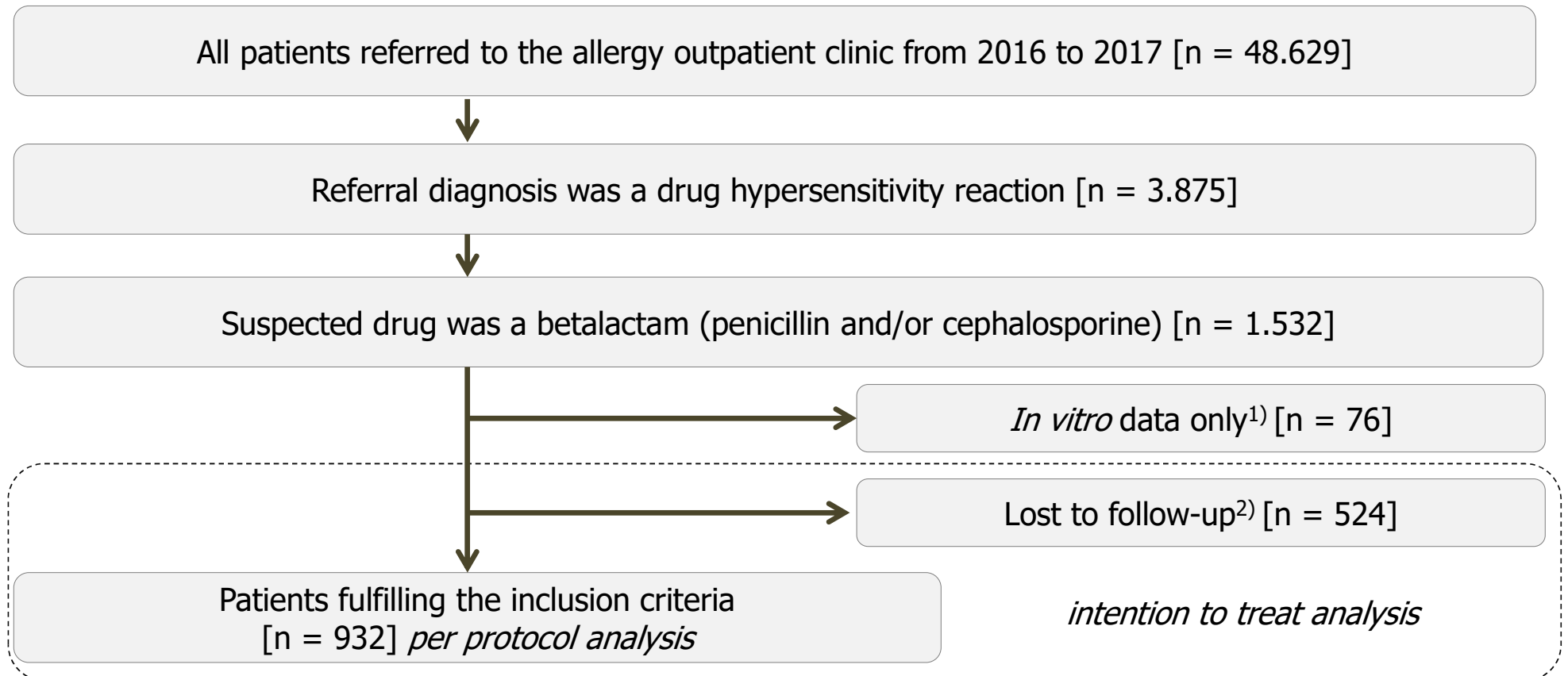


Figure 1



¹⁾ 76 blood samples had been sent in by external physicians to the reference allergy laboratory without clinical data, why these data sets were excluded from the analysis

²⁾ 523 patients who did not show up for their scheduled skin tests + 1 patient refusing skin tests

Table 1

Patients (per protocol analysis see Figure 1)

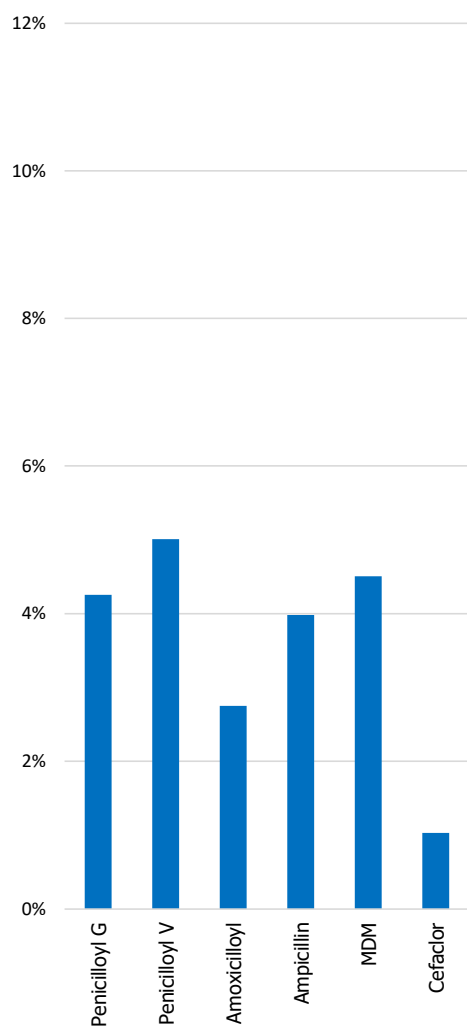
Age [a]	Female [n]	Male [n]	F:M Ratio	Σ [n]
0-10	57	58	0.98	115
11-20	47	26	1.81	73
21-40	168	50	3.36	218
41-60	228	73	3.12	301
>60	169	56	3.02	225
Σ [n]	669	263	2.54	932

Table 2

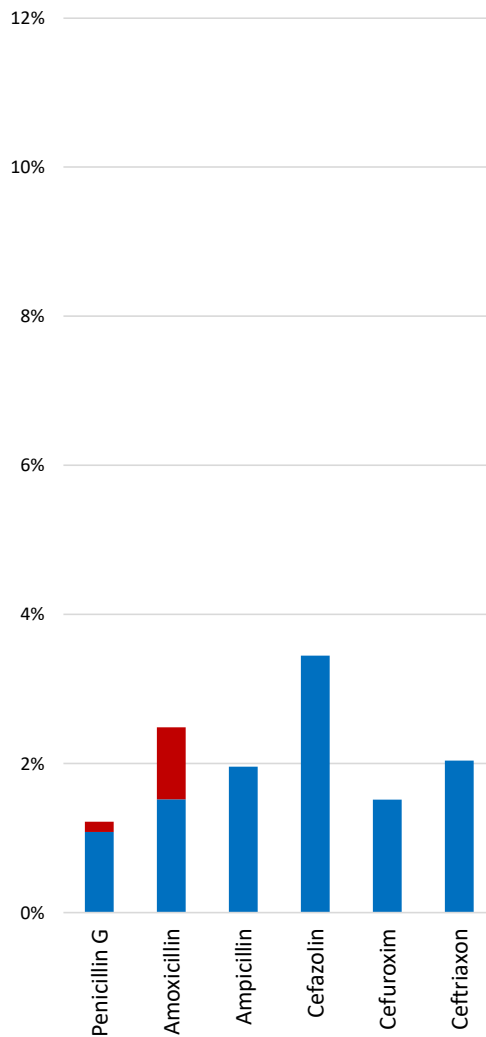
Overview of all tests

	sIgE [>0.35 kU/l] /all	Skin Prick Test 20min/all	Skin Prick Test 24h/all	Intradermal Test 20min/all	Intradermal Test 24h/all	Patch Test 24h/all
Penicillin G	16/376 4.3%	8/747 1.1%	1/747 0.1%	22/742 3.0%	3/742 0.4%	1/722 1.4%
Penicillin V	24/479 5.0%					
Amoxicillin	21/762 2.8%	11/742 1.5%	7/742 0.9%	22/737 3.0%	17/737 2.3%	11/716 1.5%
Ampicillin	16/402 4.0%	1/52 1.9%	0/52 0%	3/49 6.1%	2/49 4.1%	2/51 3.9%
MDM	5/111 4.5%					
Cefaclor	1/97 1.0%					
Cefazolin		2/60 3.3%	0/60 0%	2/57 3.5%	0/57 0%	1/50 2.0%
Cefuroxim		1/67 1.5%	0/60 0%	2/65 3.1%	0/65 0%	0/55 0%
Ceftriaxon		1/50 2.0%	0/60 0%	0/47 0%	0/47 0%	0/41 0%
Σ	83/2227 3.7%	24/1718 1.4%	8/1718 0.5%	51/1697 3.0%	22/1697 1.3%	15/1635 0.9%

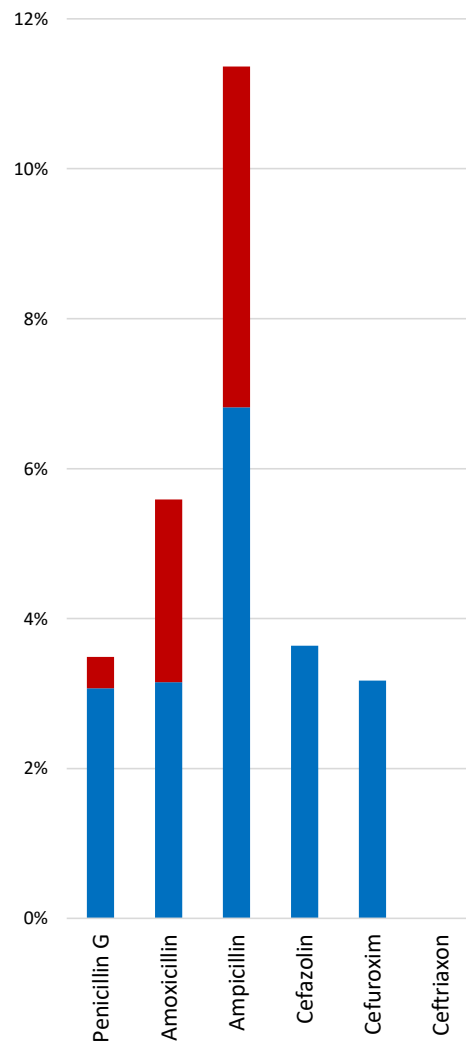
a) sIgE >0.35 kU/l



b) Skin Prick Test



c) Intradermal Test



d) Patch Test **Figure 2**

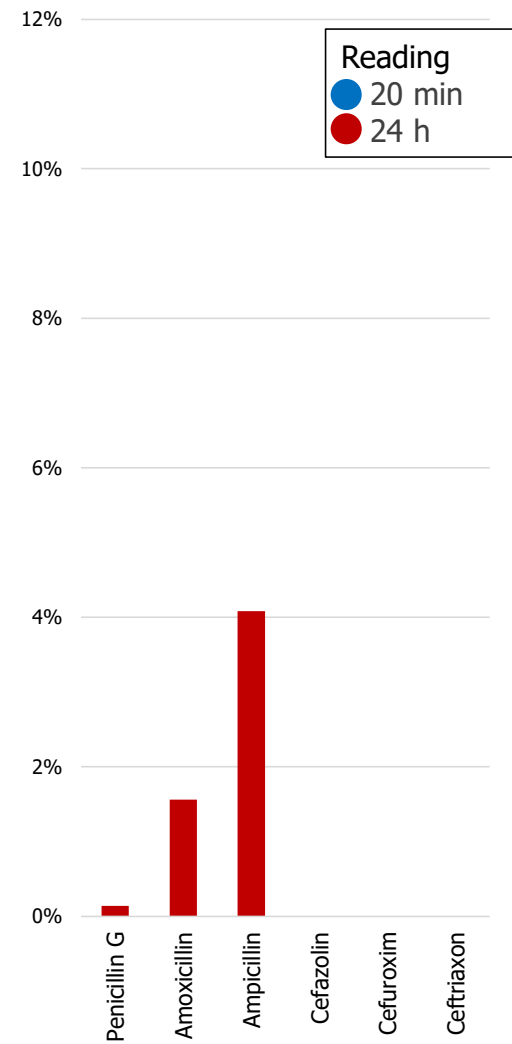
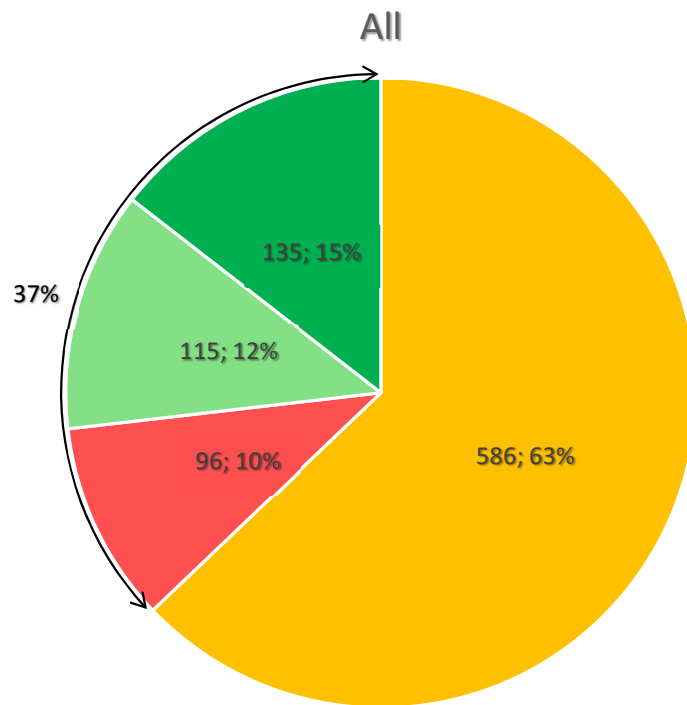
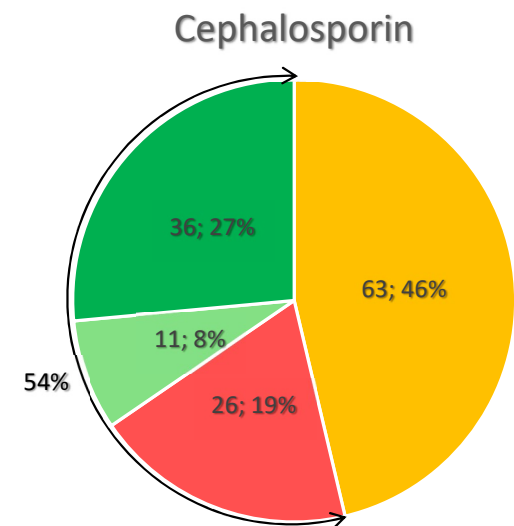
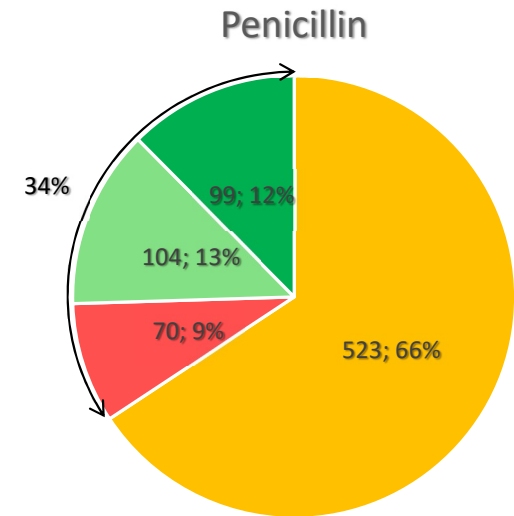


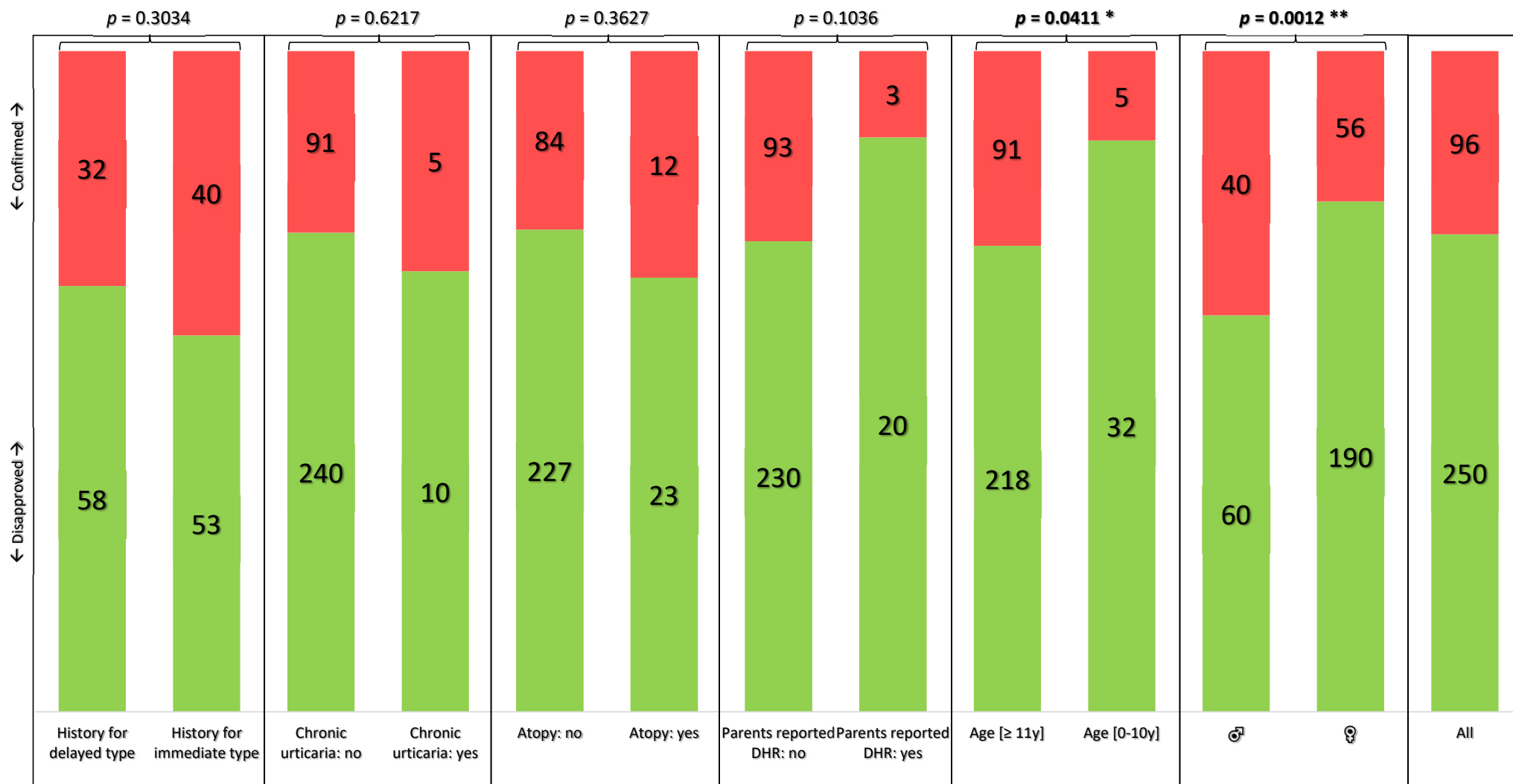
Figure 3



- Case open: Drug provocation test recommended
- Solved: Confirmed (positive sIgE/Skin Test)
- Solved: Disapproved (suggestive negative history supported by negative sIgE and/or negative Skin Tests)
- Solved: Disapproved (history incompatible with DHR)

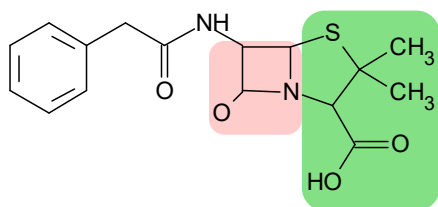


Risk factor analysis for the confirmation of a drug hypersensitivity reaction ● confirmed ● disapproved Figure 4

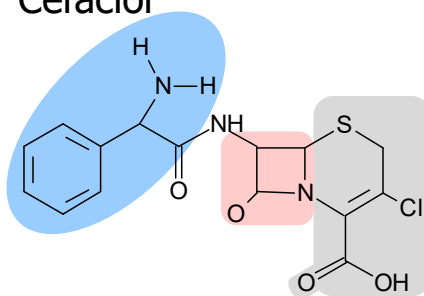


Chemical structure of β -lactam and cephalosporin antibiotics

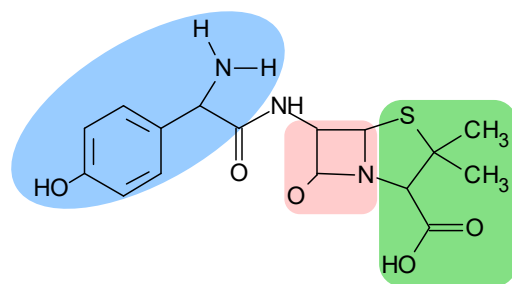
Penicillin G



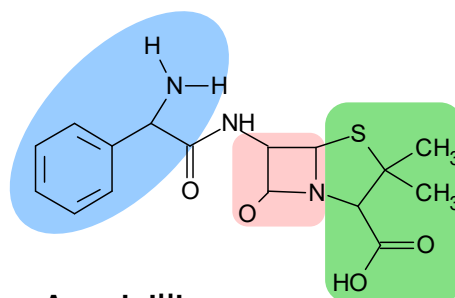
Cefaclor



- β -lactam ring (light pink)
- Thiazolidine ring (light green)
- Dihydrothiazine Ring (light grey)
- Acyl side chain (light blue)

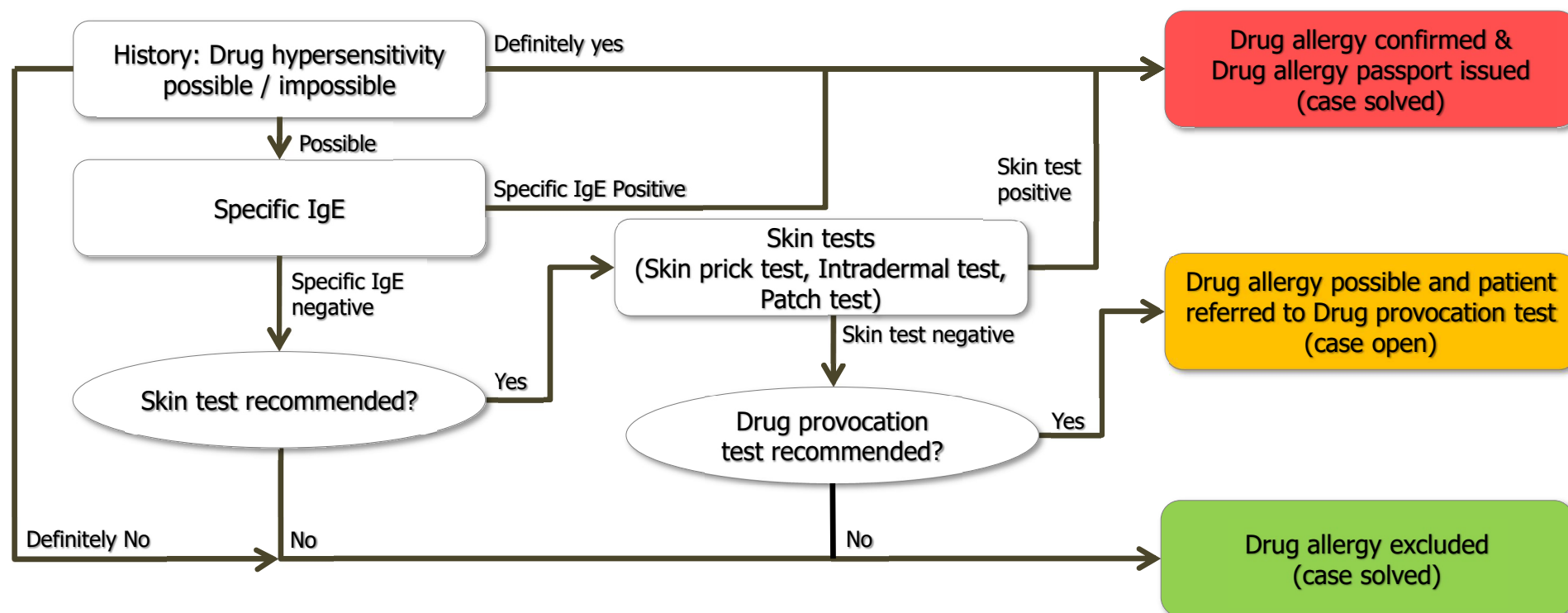


Amoxicillin



Ampicillin

Flow chart



Supplementary Figure 3

Measuring specific IgE to β -lactams

