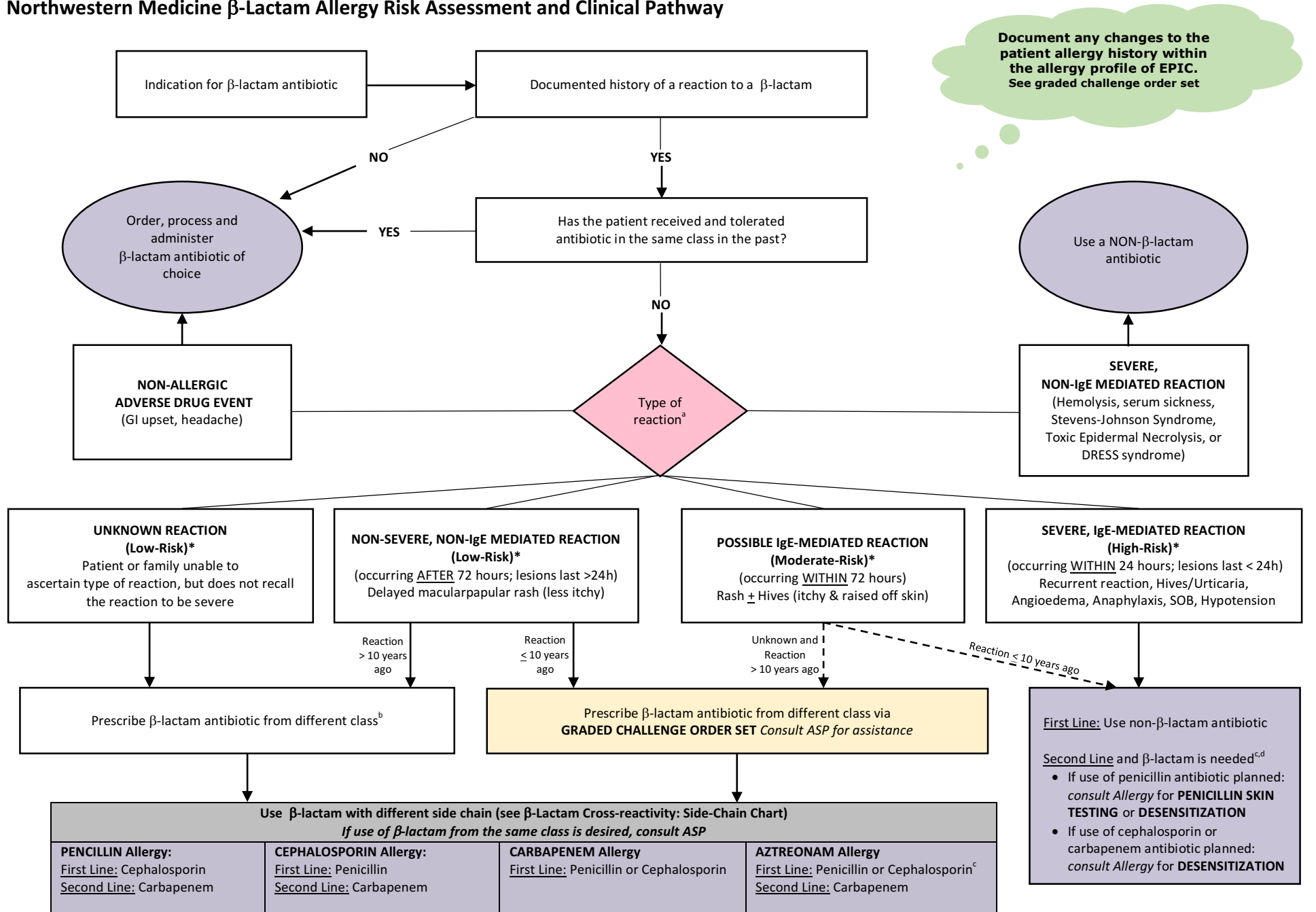


Northwestern Medicine β -Lactam Allergy Risk Assessment and Clinical Pathway



* Risk for IgE-mediated reaction (See Risk Assessment for Penicillin Allergy for detailed description)

^a Shenoy ES, et al. JAMA 2019;321(2):188-199.

^b May apply GRADED CHALLENGE PROTOCOL if reaction history was recent (< 10 years) and/or a low likelihood of being penicillin allergic with concerns of using full dose β -lactam challenge.

^c Do not use ceftazidime in aztreonam allergic patients and visa versa.

^d If no alternatives are available, aztreonam may be considered for Gram-negative infections.

----- Patient consent and clinical judgement is required to carefully weigh the risks and benefits of performing a graded challenge

Features of IgE-Mediated Reaction and Anaphylaxis

Low-Risk	<p style="text-align: center;"><u>IgE features without anaphylactic symptoms:</u></p> <p style="text-align: center;">Cutaneous symptom: itching, flushing, urticarial, and angioedema Respiratory system: rhinitis, wheezing, shortness of breath, bronchospasm Cardiovascular system: arrhythmia, syncope, chest tightness Gastrointestinal system: abdominal pain, nausea, vomiting, diarrhea</p>
Moderate-Risk	
High-Risk	<p style="text-align: center;"><u>IgE features with anaphylactic symptoms:</u></p> <p style="text-align: center;">Acute onset of illness (minutes to hours)</p> <p style="text-align: center;">Pruritus, Flushing, Hives, Angioedema</p> <p style="text-align: center;">AND</p> <p style="text-align: center;">Dyspnea, Wheeze-bronchospasm, Low peak expiratory flow, Stridor, Hypoxemia Vomiting, Crampy abdominal pain, Diarrhea</p> <p style="text-align: center;">AND/OR</p> <p style="text-align: center;">Hypotension, End-organ dysfunction, Collapse, Syncope, Incontinence</p> <p style="text-align: center;"><i>*No penicillin allergy testing should be performed on patients with possible penicillin-associated severe cutaneous adverse reaction, hemolytic anemia, organ-specific reaction, drug fever, or serum sickness. Patients with unstable or compromised hemodynamic or respiratory status and pregnant patients should never be considered low risk.</i></p>

Adapted from Shenoy ES, Macy E, Rowe T, Blumenthal KG. Evaluation and Management of Penicillin Allergy: A Review. JAMA 2019;321(2):188-199.