## What is on your differential diagnosis?

 Open this form and type some diseases/diagnoses you are considering. At this point, think about <u>big categories</u> of immune deficiencies, with examples of each.

 After you have finished entering your differential, you may proceed with the case.

(Type your responses in the online form)

## Differential Diagnosis

## B cell defects

- This is most likely, due to the frequent severe infections at multiple sites. Age
  of presentation can vary. Examples include X-linked agammaglobulinemia,
  X-linked hyper IgM syndrome, Ig heavy chain deficiencies (including ataxia
  telangiectasia), common variable immunodeficiency.
- T cell defects (SCID, or severe combined immunodeficiency)
  - There are numerous types, but by definition these includes (at minimum) T cell defects. Some forms of SCID also affect B cells. This is less likely as he's presenting at an older age. Examples of T-/B- SCID include ADA or PNP defects, VDJ recombination pathway defects. Examples of T-/B+ SCID include cytokine receptor mutations (common gamma chain gene) and DiGeorge syndrome.

## Complement Defects

 Less likely as he is having frequent severe infections, but certainly should be included in the initial differential diagnosis. He has not had a Neisseria infection, nor evidence of an autoimmune disease, but cannot be ruled out by history alone.