CLARIFIICATION

A question was raised about C3 convertase of the classical pathway. I mentioned in the lecture it is C4b2b whereas the figures in the slides indicate it is C4b2a

The main point is that the larger C2 component is the one that forms the C3 convertase.

The following paragraph is copied from our reference book Abbass:

The next complement protein, C2, then complexes with the cell surface–bound C4b and is cleaved by a nearby C1s molecule to generate a soluble C2b fragment of unknown importance and **a larger C2a** fragment that remains physically associated with C4b on the cell surface. (Note that the nomenclature of C2 fragments is different from that of the other complement proteins because the attached, larger fragment is called the piece and the released part is the b fragment.) The resulting C4b2a complex is the classical pathway C3 convertase; it has the ability to bind to and proteolytically cleave C3. Binding of this enzyme complex to C3 is mediated by the C4b component, and proteolysis is catalyzed by the C2a component. Cleavage of C3 results in removal of the

The C3 convertase of the classical pathway is the **C4b2a according to him**

Note that he says that the larger component of C2 is the C2a and he stresses that this is different from the nomenclature of other complement components... in all others the larger is called a b component

Some papers suggested that we should call the larger component C2b like all other fragments. I feel this suggestion makes sense. However, let's go with what our reference says

If you read in different references you find that some call the larger component C2a others call it C2b. it seems most immunology references still use the classical term so stick with that.

Thank you

And please keep asking questions and challenge me!

I do enjoy that!