The International IgA NEPHROPATHY (IgAN) Prediction Tool

Information for nephrologists & other healthcare professionals

What does the IgAN Prediction Tool do?

- The Prediction Tool accurately predicts at the time of kidney biopsy diagnosis of IgAN the long-term risk of worsening kidney function – measured as a 50% reduction in kidney function (eGFR) or the development of end-stage kidney disease.

How can the IgAN Prediction Tool be accessed?

- There are **two** easy ways to access the International IgAN Prediction Tool.
  - A mobile-app calculator is available on *Calculate by QxMD*, which you can access through your App store on your mobile device.
  - A web-based calculator is available at https://qxcalc.app.link/igarisk.

How was the IgAN Prediction Tool developed?

- Some members of the International IgAN Network[1] analysed data from a large number of adults with IgAN from around the world to identify which information helps predict the outcome [2].

---

[1] The International IgAN Network is a group of scientists and physicians from all around the world who work together to improve our understanding of IgAN and its treatment.

[2] The full description of the work to develop and validate the IgAN Prediction Tool can be read at: JAMA Internal Medicine 2019; https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2730331

What information is needed to use the IgAN Prediction Tool?

To use the Prediction Tool, all you need is:

- the person's age and race
- estimated glomerular filtration rate (eGFR), proteinuria and blood pressure at the time of kidney biopsy
- the Oxford MEST-C histology score from the kidney biopsy[3,4]
- whether the subject was on medications that block the renin-angiotensin system (such as ACE inhibitors and ARBs) at the time of biopsy or had previously used immunosuppression (for example corticosteroids).

When should the IgAN Prediction Tool be used?

The International IgAN Prediction Tool should be used as close as possible after kidney biopsy, ideally within 6 months.

How far ahead is the IgAN Prediction Tool reliable?

The IgAN Prediction Tool is most reliable in predicting the risk of kidney function decline up to 5 years after kidney biopsy. This is because 5 years was the average duration of follow-up in the data used to create the prediction model. The risk can be predicted up to 7 years, but not beyond 7 years because there were too few people with this duration of follow up when the tool was developed.

Can the IgAN Prediction Tool be used in all subjects with IgAN?

No

- The IgAN Prediction Tool was developed using information only from adults. It should not be used in those with age less than 18 years.
- The IgAN Prediction Tool was developed using information only from subjects with primary IgAN. It should not be used in people with secondary IgAN (for example those who develop IgAN because they have liver disease).
- It should not be used in subjects with IgAN who also have IgA Vasculitis (also known as Henoch-Schönlein purpura)

---

[3] The Oxford MEST-C score is an objective assessment of changes in the kidney biopsy which are proven to help predict outcome *(Trimarchi H etal. Oxford Classification of IgA nephropathy 2016: an update from the IgA Nephropathy Classification Working Group. Kidney Int. 2017; 91:1914-1021)*

[4] Only four of the five variables in the MEST-C score are required for the IgAN Prediction Tool; the C (crescent score) is not necessary.

Can the IgAN Prediction Tool be used in subjects of different ethnicities?
Yes
The people studied to develop and validate the International IgAN Prediction Tool were mostly of Caucasian, Chinese and Japanese ethnicities.
However two versions of the Prediction Tool are available, one that includes ethnicity and is best applied in Caucasian, Chinese and Japanese subjects, and one that does not include ethnicity so that it can be applied in other ethnic groups.

Can the IgAN Prediction Tool be used to guide immunosuppressive treatment?
No
The International IgAN Prediction Tool will not predict response to immunosuppression, and will not tell when a person should or should not be treated with immunosuppression.