

# NEQsi at a glance...

## Morphologic Embryo Quality Grading

Embryo quality is a key factor in the success of an IVF treatment cycle. Gardner's embryo grading was introduced in 1999 (1) and provides a standardized approach to quality assessment of human embryos. The Gardner system is the gold standard in embryo assessment and is used in clinics globally.

## What is NEQsi?

NEQsi (Numeric Embryo Quality Scoring Index) is a tool that converts Gardner embryo grades into a simple, linear numeric score (2). This translates complex embryo grades into a single easy to understand number for patient communications, makes comparison of embryos simpler, and supports both clinical decision making and research applications.

## NEQsi links embryo quality to outcomes

NEQsi has been scientifically validated and demonstrates a clear positive relationship between NEQsi score and pregnancy – the higher the score, the greater the likelihood of successful outcomes (Figure 1).

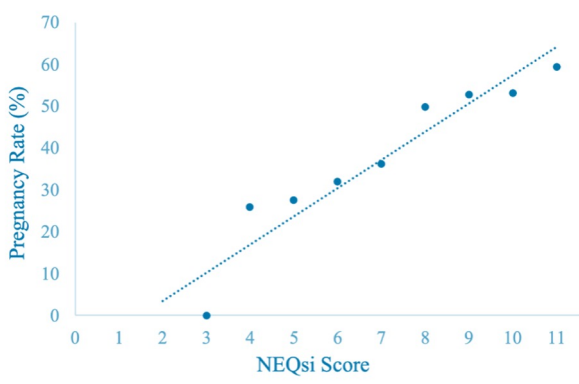


Figure 1: Strong positive correlation between NEQsi score and pregnancy rates (1).

## How are NEQsi scores calculated?

NEQsi scores can be calculated using the published method (2), or by using the free online [NEQsi calculator tool](https://aimfertility.com/neqsi-calculator) [Figure 2]. For clinics working with large datasets, the published calculations can also be programmed directly into spreadsheets.

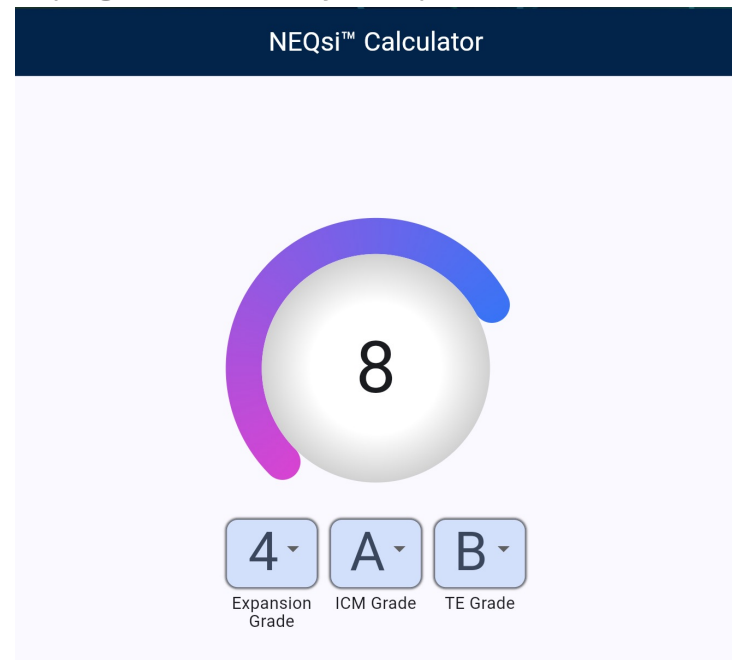


Figure 2: Free online NEQsi Calculator. Link below: <https://aimfertility.com/neqsi-calculator>

## NEQsi complements and enhances the utility of the Gardner embryo grading system

The Gardner embryo quality grading system provides detailed insight to morphologic embryo quality. However, the alphanumeric nature of the grading system relies upon 54 different categorical grades, which presents challenges in statistical analyses and difficulties in linking embryo quality to outcome probabilities in a straightforward way. NEQsi simplifies this by translating those combinations into a single number on a consistent scale.

## References:

- 1) Gardner & Schoolcraft (1999). Parthenon publishing, United Kingdom, pp 378-388.
- 2) Pierson et al (2023). RBMO, 46 (5), pp 808-818.