

Supplementary data:

Table (1): Median lethal dose (LD50) of the EA-GaNPs.

Dose (mg/kg b.w.)	No. of animals	Survivals	Deaths	Mortality %
1.5	10	10	0	0 %
3.0	10	9	1	10 %
6.5	10	8	2	20 %
12.5	10	5	5	50 %
25.0	10	3	7	70 %
50.0	10	0	10	100 %

$$\text{proportionate distance} = \frac{50\% - \text{mortality next below } 50\%}{\% \text{ mortality above } 50\% - \text{mortality next below } 50\%}$$

$$= 0.6$$

Log LD₅₀ = Log LD next below 50% + (Log increasing factor x proportionate distance)

$$= \text{Log (6.5)} + (\text{Log } 2 \times 0.6)$$

$$= 9.9 \text{ mg/kg b.w.}$$

Table (2): illustrated the severity of the histopathological alterations of mammary gland tissues of female rats in different experimental groups:

Group no.	I	II	III	IV
Histopathological alterations				
Hyperplasia of the lining epithelium of t duct system	-	+++	-	-
Cystic ductal dilatation	-	+++	-	-
Stratification of the acinar lining epithelium	-	+++	-	+

Whereas (+++) represented sever alterations, (++) represented moderate alterations, (+) represented mild alterations and (-) represented no alterations.

