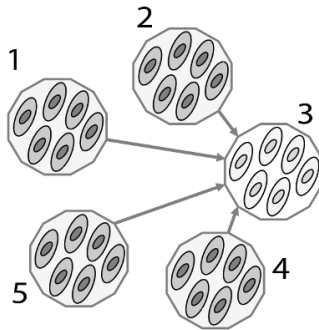


## Germline variant example

Number of cells (N) = 5

Number of times variant is seen (n) = 4

$$f \approx 0.5 - \sqrt{0.25 - n/N^2} = 0.2$$



### Germline

	1	2	3	4	5
1					
2					
3					
4					
5					

### Calculation of mosaic score:

Number of cells carrying mutation ( $N'$ ) =  $f * N = 0.2 * 5 = 1$

So, we take the 1 row with maximum hits and count it

$$n_m = \sum_{i=3} nr_i = 0$$

$$n_m = \sum_{i=1} nr_i = \sum_{i=2} nr_i = \sum_{i=3} nr_i = \sum_{i=4} nr_i = \sum_{i=5} nr_i = 1$$

We take the maximum possible  $n_m$

$$\text{Mosaic score} = n_m/n = \frac{1}{4} = 0.25$$

### Calculation of germline score:

Number of cells not carrying germline variant ( $N'$ ) =  $f * N = 0.09 * 11 = 1$

So, we take the 1 column with maximum hits and count it

$$n_g = \sum_{i=1} nc_i = \sum_{i=2} nc_i = \sum_{i=4} nc_i = \sum_{i=5} nc_i = 0$$

$$n_g = \sum_{i=3} nc_i = 4$$

We take the maximum possible  $n_g$

$$\text{Germline score} = n_g/n = \frac{4}{4} = 1$$

Fig S3. Example of calculating mosaic and germline scores for a germline variant.