Geometric mean

```
library(dplyr)
library(ggplot2)
library(tidyr)
library(knitr)

load("~/GitHub/soccer-live-predictions/soccer-live-predictions/odds/data/HDA_open.RData")
load("data/first_matches.RData")

HDA = HDA_open %>%
  anti_join(first_matches) %>%
  filter(!is.na(Home_open))

nrow(HDA)
```

```
## [1] 1786
```

```
HDA = as.data.frame(HDA)

HDA[,c(9:162)][which(HDA[,c(9:162)] == 0, arr.ind = TRUE)] = 10^-5
```

```
results = tibble(Model = c("A", "B", "C", "D", "E", "open"),
                 GeoMean = apply(HDA[,c(99, 105, 111, 117, 123, 162)], 2, EnvStats::geoMean))

kable(results)
```

Model	GeoMean
A	0.3605495
B	0.3587803
C	0.3580491
D	0.3598600
E	0.3598979
open	0.3646281