id diagnosis radius\_mean texture\_mean perimeter\_mean area\_mean smoothness\_mean compactness\_mean concavity\_mean concave points\_mean symmetry\_mean fractal dimension mean radius se texture se perimeter se area se smoothness se compactness\_se concavity\_se concave points\_se symmetry\_se fractal\_dimension\_se radius\_worst\_texture\_worst\_perimeter\_worst\_area\_worst\_smoothness\_worst\_compactness\_worst concavity worst concave points worst symmetry worst fractal dimension worst Unnamed: 32 0.737918 0.032627 0.761873 0.724975 0 0.040233 0.798006 1.000000 1.000000 0.951888 0.966716 0.998611 1.000000 1.000000 1.000000 0.429967 0.789631 0.626827 0.788803 0.651352 0.743273 0.893497 0.173190 0.980026 1.000000 0.762755 1.000000 0.906302 0.912027 1.000000 0.939532 0.910852 0.392501 0.859264 0.999746 1 0.040243 0.233067 0.586041 0.283215 0.307709 0.454072 0.517751 0.180188 0.505309 0.847351 0.322246 0.182742 0.225482 0.529268 0.213975 0.369967 0.873528 0.371494 0.791601 1.000000 0.436224 0.265667 0.307575 0.639175 0.451171 0.499926 -1 2 1.000000 1 0.851867 0.561967 0.831300 0.895756 0.681788 0.671573 0.698984 0.827644 0.707840 0.348385 0.860205 0.205743 0.732421 1.000000 0.407120 0.638077 0.464541 0.812860 0.520621 0.515726 0.800819 0.440639 0.745591 0.869823 0.611395 0.662392 0.573393 0.835052 0.779745 0.478741 -1

1.000000

0.515533

0.353916

0.743400

1.000000

0.377331

0.325828 0.205107

0.686265

0.218341

1.000000

0.689538

0.319847

0.793333

1.000000

0.558967

0.383712

0.203043

0.296351

1.000000

1.000000

0.344683

1.000000 0.521061

1.000000

0.308093 0.875941

0.744530

0.551871

0.737420

-1

-1

0.519601

1.000000

0.304207

0.680752

0.674928

0.151663

0.678717

0.897096

0.472277

3 1.000000

1.000000

4 1.000000

0.592043

0.509230

0.542057

0.874475

0.514302 0.257286

0.895628 1.000000

1.000000

0.297540

0.892084

0.884880

0.558419

0.854786

0.357399

0.701108

0.748080

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RangeIndex: 569 entries, 0 to 568
Data columns (total 33 columns):
   Column
                      Non-Null Count Dtype
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                     569 non-null
                                  int8
   diagnosis
                       569 non-null
                                     float64
   radius mean
                        569 non-null
   texture mean
                                      float64
   perimeter_mean
                         569 non-null
                                       float64
                       569 non-null
                                     float64
   area mean
                           569 non-null
                                         float64
   smoothness mean
                           569 non-null
   compactness mean
                                         float64
                         569 non-null
                                      float64
   concavity mean
                           569 non-null
   concave points mean
                                         float64
                           569 non-null
                                         float64
10 symmetry mean
11 fractal dimension mean 569 non-null float64
12 radius_se
                      569 non-null
                                    float64
13 texture se
                      569 non-null
                                    float64
                        569 non-null
14 perimeter se
                                    float64
                      569 non-null
15 area se
                                   float64
16 smoothness se
                         569 non-null
                                       float64
17 compactness se
                          569 non-null
                                       float64
18 concavity se
                        569 non-null
                                    float64
19 concave points se
                          569 non-null
                                       float64
                         569 non-null
                                      float64
20 symmetry se
                          569 non-null float64
21 fractal_dimension_se
                       569 non-null
22 radius_worst
                                     float64
23 texture worst
                        569 non-null
                                      float64
24 perimeter worst
                         569 non-null
                                      float64
                       569 non-null
                                    float64
25 area worst
```

569 non-null

569 non-null

float64

float64

26 smoothness worst

27 compactness\_worst

```
id
                0
diagnosis
                   0
radius mean
                     0
texture_mean
                       0
perimeter_mean
                     0
area mean
smoothness_mean
                        0
                         0
compactness_mean
concavity mean
                       0
concave points mean
                         0
symmetry_mean
                        0
fractal dimension mean
                         0
radius_se
                    0
texture se
perimeter se
                     0
area se
                   0
smoothness se
                      0
compactness_se
                       0
concavity se
                     0
concave points se
                       0
symmetry_se
fractal_dimension_se
                       0
radius_worst
texture worst
perimeter worst
                      0
area worst
                    0
smoothness_worst
                       0
compactness worst
                        0
concavity_worst
                      0
concave points worst
                        0
symmetry worst
                       0
fractal_dimension_worst
                         0
Unnamed: 32
```

## Correlation Heatmap (Before Analysis)



