

## the attached file refers to an R of 0.3. Might kind of increased risk might this be associated with? 1.1, 1.3, 1.5

An R (correlation coefficient) of 0.3 indicates a **low or weak positive correlation** between two variables  $\frac{[1]}{[2]}$   $\frac{[3]}{[3]}$ . This means that as one variable increases, the other tends to increase as well, but the relationship is not strong or consistent.

If you are asking about the **kind of increased risk** (in terms of relative risk or risk ratio) that might be associated with an R of 0.3, it's important to note that the correlation coefficient (R) and relative risk (RR) are different statistical measures:

- Correlation coefficient (R) measures the strength and direction of a linear relationship between two variables, ranging from -1 to 1.
- **Relative risk (RR)** compares the probability of an event (like disease) occurring in an exposed group versus a non-exposed group.

There is **no direct mathematical conversion** between R and RR, but generally, an R of 0.3 is considered weak and would typically be associated with a **modest increase in risk**.

Given your options—1.1, 1.3, 1.5—the most likely corresponding risk ratio for an R of 0.3 would be 1.3. This represents a 30% increase in risk, which aligns with the interpretation of a weak but positive association  $^{[1]}$   $^{[2]}$ . A risk ratio of 1.1 would be very minimal (barely above no effect), while 1.5 would suggest a stronger association than what an R of 0.3 typically implies.

## **Summary Table**

Correlation (R)	Strength	Likely Risk Ratio (RR)
0.3	Weak/Low	1.3

## Conclusion:

An R of 0.3 is most consistent with a risk ratio of **1.3**, indicating a weak but positive association and a modest increase in risk  $\frac{[1]}{2}$   $\frac{[3]}{3}$ .



- 1. https://pmc.ncbi.nlm.nih.gov/articles/PMC3576830/
- 2. https://pmc.ncbi.nlm.nih.gov/articles/PMC6107969/
- 3. <a href="https://www.babypips.com/forexpedia/correlation-coefficient">https://www.babypips.com/forexpedia/correlation-coefficient</a>