

V. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

1. The activity and interactions of the six tested compounds were evaluated. Two of them, lutein and violaxanthin, exhibited the lowest binding affinity to estrogen alpha ($Er\alpha$) receptor, estrogen beta ($Er\beta$) receptor, and aromatase. Both compounds demonstrated stable conformations during the simulation, indicating their potential as candidates for breast cancer therapy.
2. Lutein and violaxanthin were found to have virtually no toxic effects on the body, suggesting a favorable safety profile.

5.2 Recommendations

Based on the conducted research, it is recommended to perform further in vitro testing to validate the results obtained from the in silico approach.

