**Supplementary Table 2. Retinoid molecules used in acne treatments (Chien 2018; Bell et al. 2021; Khalil et al. 2017).**

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| --- | --- | --- | --- |
| Generation | Chemical structure | Unique features | Examples |
| First generation | Absence of aromatic radicals | Retain cyclic structure of vitamin A | Retinol, Retinaldehyde, Tretinoin, Isotretinoin, Alitretinoin |
| Second generation | Presence of one aromatic radical  | Augmented bioavailability due to increased lipophilic interactions | Etretinate, Acitretin |
| Third generation | Presence of two or more aromatic radicals | Increased specificity for retinoid receptors due to structural rigidity | Adapalene, Tazarotene |
| Fourth generation  | Presence of two or more aromatic radicals | Selective for RAR-γ receptors  | Trifarotene |