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(57) Abstract:

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The sustained-release tablet composition features Guanfacine as an active ingredient, providing controlled-release delivery for extended therapeutic action and reduced dosing frequency. The composition includes a controlled-release matrix formed by hydroxypropyl methylcellulose (HPMC), which extends the release of Guanfacine, ensuring consistent delivery and steady blood levels. Additional components may include lubricants and disintegrant. The method of treating ADHD or hypertension involves administering the tablet once daily, maintaining steady-state plasma concentration over 12 to 24 hours, and reducing side effects associated with immediate-release formulations. The preparation process involves mixing, granulating, drying, and compressing the ingredients to form the tablet. Reference Fig 1

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