# Gene-related Clinical Trials in Gestational Diabetes

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| |  |  |  |  | | --- | --- | --- | --- | | Biomolecule | Clinical Trials / Studies | Key Findings | Potential Implications | | CTNNB1 | (NCT01775072) Various cancer trials in liver, breast, and colorectal cancer | CTNNB1 mutations in tumors are linked to immune resistance in certain cancers | Could help predict immune response resistance; potential for targeted therapies | | TGFBR2 | (NCT04642452) (NCT02423343) Studies on TGF-β signaling in metabolic disorders | TGF-β pathway influences inflammation and glucose metabolism | Insight for therapies targeting inflammation in gestational diabetes | | COL6A2 | (NCT03301701) Research in fibrosis and metabolic diseases | Mutations affect extracellular matrix and fibrosis | May contribute to better understanding of tissue remodeling in diabetes | | FAT1 | (NCT04166450) (NCT02564592) Cancer research, tumor suppressor & Immunotherapy target in cancers | FAT1 mutations linked to cell signaling and growth pathways | Potential role in cellular adhesion, possibly affecting placental development | | CFH | (NCT03660371) (NCT00331557) Trials in age-related macular degeneration and immune disorders | CFH affects complement pathway, relevant to immune responses | Insight into immune regulation in gestational diabetes complications | | CHRNB3 | (NCT03660371) Studies in addiction and neurotransmitter systems | Involved in neuronal signaling, studied in nicotine addiction | Limited implications in gestational diabetes; potential indirect effects via neural regulation | | PCDH11X | (Pathway) Neurodevelopment and psychiatric research | Related to cellular adhesion in neural tissues | Limited direct impact on gestational diabetes but may relate to neurodevelopment in offspring | |