|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Table 2. Summary of the newer modalities in the treatment of IPF | | | | |
| Name | | **Mechanism of action** | **Clinical trial** | **Effects** | **Side effects** |
| Pirfenidone | | TGF-𝛃 and fibronectin inhibitor | CAPACITY/ASCEND | Anti-fibrinolytic and anti-inflammatory, reduction in all-cause mortality. | Photosensitivity, nausea, skin rash, gastrointestinal upset and anorexia. Serious adverse effects: abnormal liver function, dizziness, facial paralysis, hepatocellular tumor. |
| Nintedanib | | Tyrosine kinase inhibitors | INPULSIS/INSTAGE | Reducing FVC decline and all-cause mortality. | Diarrhea, nausea, nasopharyngitis, cough, and vomiting. |
| Saracatinib | | Src kinase inhibitor | STOP-IPF | Better effect in reducing FVC decline than PFD and NDB. | Gastrointestinal discomfort. |
| Pamrevlumab | | CTGF inhibitor | ZEPHYRUS I, II | Decrease in FVC decline, improvement in progression free survival. | Headache, cough, breathlessness, URTI, bronchitis. |
| Pentraxin-2 | | Recombinant human pentraxin-2, has an activity on monocyte differentiation | STARSCAPE-OLE | Owing of futility, stopped. | Cough, nasopharyingitis, fatigue. |
| BI 1015550 | | phosphodiesterase 4B (PDE4B) inhibitor | PRAISE | Reduction in FVC decline with/without antifibrotic therapy. | Mild diarrhea. |
| Ziritaxestat | | selective autotaxin inhibitor | ISABELA 1, 2 | Annual rate in FVC decline, but stopped due to concerning safety. | Lower respiratory tract infections. |
| PBI-4050 | | interacting with GPR40 and GPR84 (activation and suppression respectively) | NCT02538536 | Reduced histological lesions presented as change in lung architecture, thickness of the alveolar wall and fibrosis. | Mild diarrhea, headache and nausea. |
| Bexotegrast | | inhibitor of integrins v6 and v1 | INTEGRIS-IPF | Excellent safety profile Less progress was supported by exploratory analysis. | Mild diarrhea. |
| BMS-986020/ BMS-986278 | | LPA1 antagonists | NCT04308681 | Change in percent predicted (ppFVC). | Hepatobiliary toxicity in BMS-986020. |
| TD 139 | | Gal-3 inhibitor | NCT02257177 | Slower decline in FVC. | Taste disturbance and cough. |
| Dasatinib (D) and Quercetin (Q) | | Senescent cell anti-apoptotic pathways (SCAPs) inhibitors | NCT02874989 | Improved lung function and exercise capacity. | Nausea, weakness, headache, sleep disturbance, and sepsis in patients with chronic cholelithiasis. |

*TGF-𝛃; Transforming Growth Factor-beta, CTGF inhibitor; Connective Tissue Growth Factor inhibitor, GPR40; G-protein-coupled receptor 40, GPR84; G-protein-coupled receptor 84, LPA1 antagonists; Lysophosphatidic Acid 1 Antagonists.*