**“Developing future IPF therapies”**

A monoclonal antibody that binds to connective growth factor (CTGF), a central mediator of tissue remodeling and fibrosis, is currently being evaluated in a human Phase II dose escalation clinical trial. Monoclonal antibodies are a man-made version of the antibody molecules we all carry in our bloodstream. They are engineered to bind specifically to a target protein, in this case CTGF. By binding to CTGF, the antibody is thought to prevent CTGF from promoting fibrosis. To date, 39 IPF patients have completed treatment with monoclonal antibody. Of 38 patients, 27 (71.1%) experienced improvement or <5% loss in forced vital capacity over 48 weeks. Extension studies past 48 weeks are currently underway.

An inhaled formulation of pirfenidone is currently in being tested in animals, for possible future use in people with IPF. Investigators measured drug absorption in the lung in rats with a disease used to model human IPF, and they also followed changes in the animals’ fibrosis scores after treatment with pirfenidone. Low inhaled doses of pirfenidone appeared to highly efficient, both for delivery and for reducing lung fibrosis. Although success in the rat model may not translate to benefits for IPF patients, Dr. Martin Kolb of McMaster University was optimistic, describing the effects of inhaled pirfenidone in the animals as “quite remarkable.”