Surrozen Presents Data Demonstrating the Promise of Antibody-Based Wnt Mimetics in Treating Cornea Endothelial Dystrophies and Dry Eye Disease at the Associations for Research in Vision and Ophthalmology (ARVO) Annual Meeting

May 9, 2024

- *In preclinical models of cornea endothelial dystrophies, a Surrozen antibody-based Wnt mimetic reduced corneal edema and stimulated endothelial cell proliferation in the cornea*
- *Surrozen's antibody based Wnt mimetic also increased detectable tear volume production in dry eye disease models*

SOUTH SAN FRANCISCO, Calif., May 09, 2024 (GLOBE NEWSWIRE) -- Surrozen, Inc. ("Surrozen" or the "Company") (Nasdaq: SRZN), a company pioneering targeted therapeutics that selectively activate the Wnt pathway for tissue repair and regeneration, announced today that preclinical data highlighting the potential for Surrozen's antibody-based Wnt mimetic technologies to treat cornea endothelial damage and Dry Eye Disease (DED) were presented on May 7, 2024 at the Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting in Seattle.

"We are pleased to present new data based on preclinical studies that demonstrate activation of the Wnt pathway leads to regeneration of cells in damaged eye tear gland tissue in Dry Eye Disease and proliferation of endothelial cells in Fuchs' Endothelial Cell Dystrophy, that can halt the loss of vision and blindness that develop as the diseases progress," said Yang Li, Ph.D. Executive Vice President of Research. "These early results are important as Fuchs' Endothelial Cell Dystrophy and Dry Eye Disease are severe diseases with few effective treatments available. We look forward to continuing our evaluation of this novel approach to tissue and cell regeneration utilizing our antibody based Wnt mimetic SWAP technologies."

Exploring Cornea Endothelium Regeneration with Selective Wnt Mimetics (Presentation, May 7, 2024, ARVO Annual Meeting)

Preclinical studies evaluated whether Wnt signaling activation through Surrozen's antibody-based Wnt mimetic, that utilizes the SWAP (Surrozen Wnt signal activating proteins) technologies, can induce cornea endothelial cell proliferation and restore vision in cornea endothelial dystrophies when administered locally. The company evaluated a therapeutic approach to stimulate endothelial cell proliferation as human corneal endothelial cells have a limited capacity to regenerate.

The studies profiled both human normal and Fuchs' patient cornea endothelium which determined that Frizzled (Fzd)1/2/7 was expressed in these tissues and that activating Wnt signaling via Fzd1/2/7 in human endothelial cell cultures increases proliferation.

The lead molecule, a Surrozen Fzd 1/2/7 SWAP antibody, increased proliferation of endothelial cells *in vitro* in human cells. In a mouse model of cryoinjury, the Surrozen's antibody demonstrated:
- activation of Wnt signaling,
- reduced corneal edema and thickness, and
- demonstrated improved corneal clarity.

In eye diseases such as Fuchs' Endothelial Cell Dystrophy (FECD), there is a loss of endothelial cells which leads to corneal swelling, haziness and vision loss. There are about 2.9 million diagnosed patients with FECD. Current therapies are limited to endothelial transplant or resection once the disease is in a late stage. There is a significant area of unmet need for therapies that could mitigate disease progression and/or improve surgical efficacy. Results presented by Surrozen demonstrate that activation of the Wnt pathway has the potential to stimulate endothelial cell proliferation, reduce central corneal thickness and improve visual clarity.

Antibody based Wnt Mimetic Induced Lacrimal Gland Regeneration and Reverses Aqueous Tear Deficiency (Paper Session, May 7, 2024, ARVO Annual Meeting)

Preclinical studies evaluated whether Wnt signaling activation using Surrozen's antibody-based Wnt mimetic, that utilizes SWAP technologies, can activate lacrimal gland acinar cells and restore tear secretion.

Wnt receptors are present in the adult lacrimal gland tissue, and Surrozen's SWAP antibody activated Wnt signaling, stimulated acinar cell expansion, and accelerated tear volume recovery in preclinical models. Based on preclinical data, the company believes that Surrozen's antibody-based SWAP platform molecule has the potential to regenerate lacrimal gland tissue in dry eye disease.

In diseases such as DED and Sjogren's Syndrome, the destruction of lacrimal gland function leads to reduced tear fluid production which leads to irritation, burning sensation, pain and damage to the eye. There are approximately 16 million people in the United States that have been diagnosed with Dry Eye Disease. Currently, there is no epithelial regeneration strategy available as treatment usually consists of anti-inflammatory topical eye drops and tear replacements.

About SWAP and the Wnt Pathway Signal Activation through Wnt Mimetic in Select Eye Diseases
Surrozen Wnt signal activating proteins (SWAP) are designed to mimic the activity of naturally occurring Wnt proteins. They are bispecific full-length human (IgG) antibodies that, like Wnt proteins, directly activate the Wnt-signaling pathway in target tissue by binding to two of its natural co-receptors, Fzd and Lrp. With our SWAP technology, Surrozen combines Fzd and Lrp antibody-binding domains into bispecific antibodies to selectively activate Wnt signaling. Surrozen has generated and validated a broad library of SWAPs that have successfully activated Wnt-signaling. SZN-413, which is in development for retinal diseases and partnered with Boehringer Ingelheim, utilizes our SWAP technology and is designed to activate the Wnt pathway in injured tissue where certain Fzd receptors are expressed and the natural Wnt ligand is disturbed. Surrozen is also evaluating the potential of

Surrozen's SWAP antibodies for the treatment of corneal endothelial dystrophies and dry eye disease through activation of Wnt signaling.

About SZN-413 for Retinal Diseases
SZN-413 is a bi-specific antibody targeting Fzd4-mediated Wnt signaling designed using Surrozen's SWAP™ technology. It is currently being developed for the treatment of retinal vascular-associated diseases. Data generated by Surrozen with SZN-413 in preclinical models of retinopathy demonstrated that SZN-413 could potently stimulate Wnt signaling in the eye, induce normal retinal vessel regrowth, suppress pathological vessel growth and reduce vascular leakage. This novel approach could thus potentially allow for regeneration of healthy eye tissue, not only halting retinopathy, but possibly allowing for a full reversal of the patient's disease.

In the fourth quarter of 2022, Surrozen entered into a strategic partnership with Boehringer Ingelheim for the research and development of SZN-413 for the treatment of retinal diseases. Under the terms of the agreement, Boehringer Ingelheim received an exclusive, worldwide license to develop SZN-413 and other Fzd4-specific Wnt-modulating molecules for all purposes, including as a treatment for retinal diseases, in exchange for an upfront payment to Surrozen of $12.5 million. Surrozen will also be eligible to receive up to $587.0 million in success-based development, regulatory, and commercial milestone payments, in addition to mid-single digit to low-double digit royalties on sales. After an initial period of joint research, Boehringer Ingelheim will assume all development and commercial responsibilities.

About Wnt Signaling
Wnt signaling plays key roles in the control of development, homeostasis, and regeneration of many essential organs and tissues, including liver, intestine, lung, kidney, retina, central nervous system, cochlea, bone, and others. Modulation of Wnt signaling pathways has potential for treatment of degenerative diseases and tissue injuries. Surrozen's platform and proprietary technologies have the potential to overcome the limitations in pursuing the Wnt pathway as a therapeutic strategy.

About Surrozen
Surrozen is a clinical stage biotechnology company discovering and developing drug candidates to selectively modulate the Wnt pathway. Surrozen is developing tissue-specific antibodies designed to engage the body's existing biological repair mechanisms with a current focus on severe liver and eye diseases. For more information, please visit www.surrozen.com.

Forward Looking Statements
This press release contains certain forward-looking statements within the meaning of the federal securities laws. Forward-looking statements generally are accompanied by words such as "will," "plan," "intend," "potential," "expect," "could," or the negative of these words and similar expressions that predict or indicate future events or trends or that are not statements of historical matters. These forward-looking statements include, but are not limited to, statements regarding Surrozen's discovery, research and development activities, in particular its development plans for its product candidate SZN-413 (including the potential for such product candidate to be used to treat human disease, as well as the potential benefits of such product candidate), and the Company's partnership with Boehringer Ingelheim, including the potential for future success-based development, regulatory, and commercial milestone payments, in addition to mid-single digit to low-double digit royalties on sales. These statements are based on various assumptions, whether or not identified in this press release, and on the current expectations of the management of Surrozen and are not predictions of actual performance. These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on as a guarantee, an assurance, a prediction, or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions. Many actual events and circumstances are beyond the control of Surrozen. These forward-looking statements are subject to a number of risks and uncertainties, including the initiation, cost, timing, progress and results of research and development activities, preclinical and clinical trials with respect to SZN-043, SZN-413 and potential future drug candidates; the Company's ability to fund its preclinical and clinical trials and development efforts, whether with existing funds or through additional fundraising; Surrozen's ability to identify, develop and commercialize drug candidates; Surrozen's ability to successfully complete preclinical and clinical studies for SZN-043, SZN-413, or other future product candidates; the effects that arise from volatility in global economic, political, regulatory and market conditions; and all other factors discussed in Surrozen's Annual Report on Form 10-K for the year ended December 31, 2023 and Surrozen's Quarterly Report on Form 10-Q for the quarter ended March 31, 2024 under the heading "Risk Factors," and other documents Surrozen has filed, or will file, with the Securities and Exchange Commission. If any of these risks materialize or our assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. There may be additional risks that Surrozen presently does not know, or that Surrozen currently believes are immaterial, that could also cause actual results to differ from those contained in the forward-looking statements. In addition, forward-looking statements reflect Surrozen's expectations, plans, or forecasts of future events and views as of the date of this press release. Surrozen anticipates that subsequent events and developments will cause its assessments to change. However, while Surrozen may elect to update these forward-looking statements at some point in the future, Surrozen specifically disclaims any obligation to do so, except as required by law. These forward-looking statements should not be relied upon as representing Surrozen's assessments of any date after the date of this press release. Accordingly, undue reliance should not be placed upon the forward-looking statements.

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