UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

January 30, 2018

Date of Report (Date of earliest event reported)

Windtree Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation)

000-26422

(Commission File Number)

94-3171943

(IRS Employer Identification Number)

2600 Kelly Road, Suite 100 Warrington, Pennsylvania 18976

(Address of principal executive offices)

(215) 488-9300

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

| Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions: |
|---|
| □ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425) □ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12) |
| ☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)) |
| □ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)) |
| Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934. |
| Emerging growth company \square |
| If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. \Box |
| |

Item 8.01. Other Events.

Executives of Windtree Therapeutics, Inc. (the "Company") plan to present to potential investors the information contained in the presentation attached to this Current Report on Form 8-K as Exhibit 99.1.

The presentation includes, among other things, updates concerning the Company's lead development program, AEROSURF®, including the Company's proprietary aerosol delivery system ("ADS") and phase 2 clinical programs in premature infants 26-to-34 weeks gestational age. The Company is planning to conduct a bridging study to transition from a prototype ADS used in the phase 2 clinical programs to a next generation ADS ("NextGen ADS") that the Company plans to use in the planned phase 3 clinical program and, if approved, early commercial activities. The bridge study is designed (i) to gain experience with the next generation NextGen ADS, (ii) to confirm whether our development objectives have been met and (iii) to generate additional higher dose treatment data to augment the higher dose data obtained in the phase 2b clinical trial, which was adversely affected by treatment interruptions.

In addition, the presentation also includes the Company's 2018 corporate objectives, which include:

- Complete the design verification and validation programs for the NextGen ADS in accordance with the Company's plans;
- Initiate and execute the proposed bridging study in accordance with the clinical plan;
- Seek regulatory clarity in the European Union and the United States with respect to potential marketing approvals for AEROSURF and the lyophilized version of the Company's liquid instillate, which was approved in the United States under the name SURFAXIN® in 2012;
- Seek to identify and pursue strategic and other funding opportunities to improve the Company's balance sheet and financial condition;
- Seek investment and strategic opportunities to access new and existing assets within the Company and Lee's Pharmaceutical Holdings Ltd.'s
 organization to diversify and strengthen the Company and leverage its capabilities and resources for the future.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits:

99.1 Windtree Therapeutics, Inc. Presentation dated January 29, 2018.

Cautionary Note Regarding Forward-looking Statements:

To the extent that statements in this Current Report on Form 8-K are not strictly historical, including statements as to business strategy, outlook, objectives, future milestones, plans, intentions, goals, future financial conditions, future collaboration agreements, the success of the Company's product development, cash flows, future revenues, the timing of planned clinical trials or otherwise as to future events, such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements contained in this Current Report are subject to certain risks and uncertainties that could cause actual results to differ materially from the statements made. Such risks and others are further described in the Company's filings with the Securities and Exchange Commission including the most recent reports on Forms 10-K, 10-Q and 8-K, and any amendments thereto. Any forward-looking statement made by us in this Current Report on Form 8-K is based only on information currently available to us and speaks only as of the date on which it is made. The Company undertakes no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Windtree Therapeutics, Inc.

By: /s/ Craig Fraser

Name: Craig Fraser
Title: President and Chief Executive Officer

Date: January 30, 2018





Corporate Presentation January 29, 2018

OTCQB:WINT

Forward-looking Statement

To the extent that statements in this presentation are not strictly historical, including statements about the Company's clinical development programs, business strategy, outlook, objectives, plans, intentions, goals, future financial conditions, future collaboration agreements, the success of the Company's product development activities, or otherwise as to future events, such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The forward-looking statements contained in this presentation are subject to certain risks and uncertainties that could cause actual results to differ materially from the statements made. These risks are further described in the Company's periodic filings with the Securities and Exchange Commission (SEC), including the most recent reports on Forms 10-K, 8-K and 10-Q, and any amendments thereto ("Company Filings")

Under no circumstances shall this presentation be construed as an offer to sell or as a solicitation of an offer to buy any of the Company's securities. In addition, the information presented in this deck is qualified in its entirety by the Company Filings. The reader should refer to the Company Filings for a fuller discussion of the matters presented here.



Windtree Therapeutics

- Public, small cap biopharmaceutical / medical device company
- Based in Warrington, PA with approximately 27 employees
- Focused in the acute respiratory area with a lead program expected to address a significant need and expand the Respiratory Distress Syndrome (RDS) in premature infants market (currently valued at ~\$400 million*)
- Windtreetx.com





Respiratory Distress Syndrome (RDS)

Primary characteristic is surfactant deficiency in underdeveloped lungs of premature infants (born with a lack of natural lung surfactant required for open airways and proper gas exchange $- O_2$ in and CO_2 out)

American Academy of Pediatrics guidelines recommend providing surfactant replacement within the first hours of life¹

Neonatologists believe the **highest unmet need in RDS is the ability to deliver** surfactant noninvasively to patients²





AAP guidelines, 2013

2. WINDTREE primary market research (2014)

Current RDS Treatment Pathways



Initial treatment options include invasive and non-invasive methods:



Surfactant Therapy

· Delivered via intubation,

mechanical ventilation

usually in combination with

Invasive mechanical ventilation (IMV)

- Animal-derived surfactant
 Requires sustained
 - intubation
 Supports breathing until patient can be weaned

nCPAP Support until presumptive endogenous surfactant production

- Non-invasive nasal delivery of continuous positive airway pressure (nCPAP)
- Supports breathing until the infant can be weaned

TRADE-OFFS

Timely therapy delivery vs.

Exposure to known significant complications

Avoid exposure to known significant complications

vs.

Cannot deliver surfactant and risk failure

nCPAP failure

>50% are intubated and ventilated

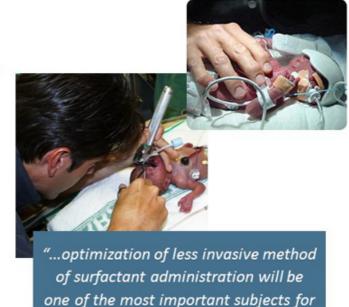


Source: Windtree and third-party market research

Clinicians Seeking a NonInvasive Way to Deliver Surfactant

What is wanted:

- ✓ Avoid the risks and complications associated with delivery of surfactant therapy via intubation and mechanical ventilation
- √ Possibility of repeat doses
- ✓ Avoid clinical instability associated with administration of liquid surfactant bolus administration
- ✓ Enable administration by nonspecialist staff
- ✓ Reduce cost of treating premature infants



Kribs A. How best to administer surfactant to VLBW infants. Arch Dis Child Fetal Neonatal Ed 2011;doi:10.1136.

research in the field of surfactant therapy of RDS in coming years".



1. Pillow & Minocchieri: Neonatology, 2012

Windtree Technology Platform - AEROSURF®

Potential to Provide Both Non-Invasive and Invasive Solutions to Treat RDS

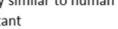
Proprietary Synthetic KL4 Surfactant

Designed to be structurally similar to human lung surfactant

Liquid KL4 surfactant (intratracheal instillate) for RDS approved by the FDA

Lyophilized (freeze-dried) KL4 surfactant currently being developed for AEROSURF®







Designed specifically to aerosolize and deliver KL4 surfactant





Transformative Potential of AEROSURF®

Surfactant Therapy

Reversing surfactant deficiency has a profound positive impact on respiration

> Surfactant therapy delivers near-immediate clinical improvement

BENEFITS

RISKS

BPD

Infection, ventilator-induced pneumonia

Brady cardia, hypertension, and hypoxemia

Peri-dosing events associated with bolus administration

Airway trauma Lung injury

Pain, discomfort

Long-term impacts including vocal cord damage, asthma, lung damage

nCPAP Respiratory Suppor

Avoids exposure to the risks of invasive delivery of surfactant therapy

Negative impacts of delayed surfactant replacement therapy (SRT)

Prolonged RDS until either endogenous surfactant production or transfer to invasive surfactant therapy

Significant rate of nCPAP failure leading to delayed surfactant therapy via intubation and mechanical ventilation

The potential for AEROSURF

The benefits of traditional surfactant therapy without the complications associated with intubation and mechanical ventilation

Noninvasive administration eliminates or reduces the need to delay surfactant therapy

Synthetic formulation



Reduced morbidity

Lower total cost of care

Potential Drivers of AEROSURF® Opportunity



#1 stated unmet need in RDS

"Noninvasive surfactant delivery" = 54% top, unaided response (3x higher than next response)

20-30% reduction in nCPAP failure is meaningful

Results in >40% reported, expected patient share¹

Price (but ↓Total Hospital Cost)

Potential for positive health economics related to noninvasive approach, cost avoidance, etc.²

Market Expansion

Potential to bring surfactant therapy to new, lower skilled and less certified hospitals and geographies due to non-invasive, less specialized delivery³

- 1. N=278 Neonatalogists, US & EU; WINDTREE primary market research (2014)
- 2. WINDTREE primary market research (2014)
- 3. Windtree research and estimates



Significant RDS Global Revenue Opportunity



| Regions | Estimated 2016 Annual Revenue Invasive surfactant therapy only† |
|-----------------|--|
| US | \$90 million |
| EU/ME | \$85 million |
| LATAM | \$95 million |
| China / Asia | \$115 million |
| GLOBAL | ~\$400 million |

- Only 50% to 60% of RDS patients currently treated with surfactant therapy
- Opportunity to expand treatment population due to easier, non-invasive approach enables delivery in less specialized centers
- Positive pharmacoeconomic value supports higher price

\$800MM -\$1B AEROSURF® Potential



CDC National Vital Statistics; UNICEF data; Windtree market research; IMS MIDAS data; private companies with access to government purchasing records for Latin America, China and Middle East

Medical Device and Device Studies



Innovative Aerosol Delivery System (ADS)



Proprietary Innovative Aerosol
Delivery System (ADS)

Designed specifically to aerosolize and deliver KL4 surfactant

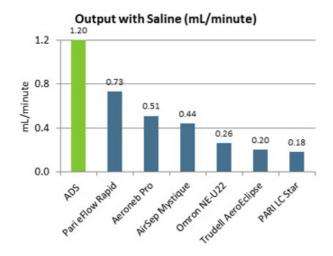


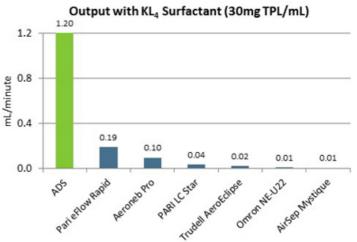
- AEROSURF® innovation made possible by novel medical device
- Unique aerosol delivery system (ADS) technology utilizing pressure and heated capillary has demonstrated ability to break through the barrier to effectively aerosolize KL4 surfactant
- Controlled, effective and reproducible performance validated in bench comparative studies and in the lung deposition study
- Developed in partnership with Battelle Memorial Institute



ADS Technology Provides Better Output Rate Aerosolizes surfactant as well as saline

Aerosol output rate





Saline output of ADS technology is close to double the next best technology tested KL₄ surfactant output of ADS technology is six times the next best technology tested

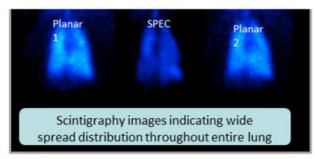
Unlike other available aerosol technologies, the ADS system produces more particles in the optimal 1 to 3µm range than a commercially available vibrating mesh nebulizer, and delivers a consistent KL4 surfactant aerosol output, minute by minute, device after device



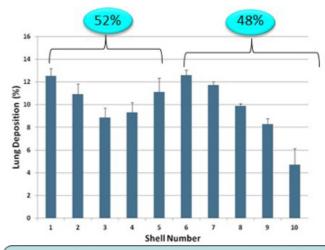
Source: Windtree - Data on file.

Lung Deposition Study in Non-Human Primates

- Use of non-human primates (cynomolgus macaques) Nose, throat, & lung anatomy comparable to infants; respiratory function similar to preterm infants
- Radiolabeled KL4 surfactant aerosolized using Aerosol Delivery System (ADS), delivered via nasal cannula in 3-10 min exposures inhaled from a nCPAP circuit
- Measured total & regional pulmonary deposition by a series of gamma images with SPECT data used to determine regional lung deposition using a quantitative model



Total Deposition Across 10 Equal Shells



Drug deposition observed across all areas of the lung after 3 to 10 min of inhalation demonstrating generally uniform distribution of drug between the inner half and the outer half of the lungs



Windtree data on file

AEROSURF® Clinical Studies



AEROSURF® Phase 2 Program Components

| Study / Activit | Rationale / Objective | Status |
|--------------------------|--|--|
| Phase 2a | Initial safety & tolerability (29-34 wk gestational age (GA)) | Completed |
| 2a Expansion | Extending the dose range in 29-34 wk GA | Completed |
| Phase 2a | Safety and tolerability in 26-28 wk GA | Completed |
| Phase 2b | 28 – 32 wk GA - Dose and evidence of clinical effect | Completed |
| Other Studies: | | |
| Observational Study | Understand treatments and outcomes for our target population | >2000 pts data collection complete |
| Lung Deposition Study | Assess inhaled surfactant distribution in non-human primate lungs | Completed |
| Other Activities: | | |
| Licensing in Asia | Access ex-US opportunity and development support with Lee's | Completed |
| Device Development | Design verification, validation (DV) and clinical experience with next generation, phase 3 and commercial device | DV on Track for 1H 2018 |
| FDA Interaction | Confirm strategic direction and operational approach | Successful Type C meetings as well as Fast Track Designation |

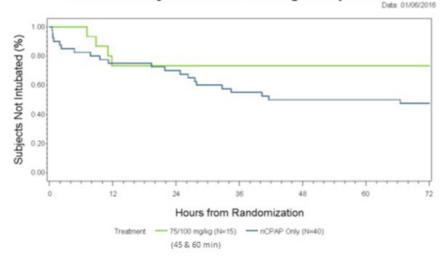
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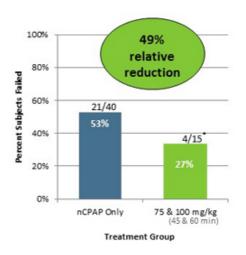
Phase 2a Study (29 to 34 wk GA)

45 and 60 Minute Dose Groups - nCPAP Failure through 72 hours

Time to nCPAP Failure







At 72 hours post-dosing, 27% of AEROSURF® patients in the combined 45 and 60 minute dose groups required intubation compared to 53% in the control group; a relative reduction in nCPAP failure of 49%



* One intubated patient excluded due to being inappropriately enrolled

AEROSURF® Phase 2a Study in 26-28 week GA

Safety and Tolerability Assessment

- The FDA requested that we conduct a separate safety study in smaller premature infants before including them in blinded studies
- Multicenter, randomized, open-label, controlled study in 48 premature infants 26 to 28 weeks GA receiving nCPAP for RDS to evaluate the safety and tolerability of aerosolized KL4 surfactant administered in three escalating doses (8 treatment, 8 control per dose group)
- The primary objective of the study was successfully met. The safety and tolerability profile of AEROSURF® remains generally comparable to the nCPAP control group across gestational ages
 - The safety profile of AEROSURF in younger GA neonates allows this group to be included in AEROSURF trials going forward
 - 26-27 week GA neonates are more surfactant deficient and may require additional surfactant administration. The phase 2 safety profile will allow us to administer more surfactant to babies that need it
- Despite limited treatment numbers, we observed a positive early effect on prolonging the time to intubation (a consistent finding across studies) as well as signs that nCPAP failure can be reduced in this GA range and believe we have a dose identified to produce the desired effect in clinical studies moving forward



AEROSURF® Phase 2a in 26-28 week GA - Potentially Important Observation Related to Bronchopulmonary Dysplasia (BPD)

| BPD | Rate | Patients |
|----------|------|----------|
| AEROSURF | 0% | 0/24 |
| Control | 25% | 6/24 |

- Bronchopulmonary Dysplasia (BPD) or chronic lung disease of the newborn is one of the most common complications of prematurity and RDS treatments. It occurs in up to 40% of infants born at or before 28 week GA who have required intubation, mechanical ventilation and oxygen therapy.
- BPD is associated with ongoing pulmonary disease, neurodevelopmental impairment and increased healthcare utilization.
- Despite its importance, effective prevention and treatment strategies for BPD have been elusive and there are no approved treatment.
- BPD contributes to substantial patient morbidity and healthcare costs.
- Decreasing BPD would address a significant unmet medical need and represents an upside scenario in our outlook. Additional study is warranted within our future RDS trials.



JAMA 2016; 316 (6); 611-624; JAMA Pediatric 2015; 169 (8); 731-739

AEROSURF® Phase 2b Study (28 to 32 wk GA)

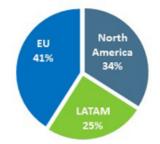
Trial Objectives

- Evaluate safety and tolerability
- · Demonstrate efficacy
- Determine effect size for phase 3 planning
- Dose(s) selection for phase 3
- Evaluate and further develop our Phase 2 prototype device performance

Trial Design

- 3 dose groups:
 - ✓ 25 minute, 40mg/kg (up to 2 repeat doses)
 - √ 50 minute, 80mg/kg (up to 2 repeat doses)
 - ✓ nCPAP alone Control
- Up to 240 (80 per group) total
- Treatment assignment was blinded
- Infants with RDS between 28-32 wk GA

221 Patients Enrolled



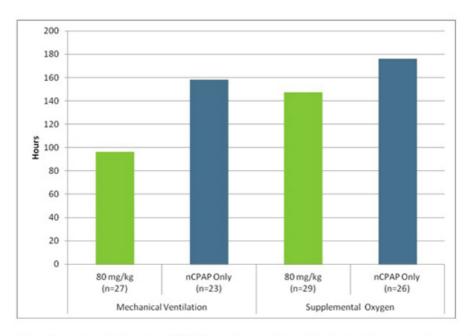
47 sites enrolled:

| • US | 17 |
|---------------------------------|----|
| Canada | 3 |
| Poland | 9 |
| Netherlands | 1 |
| Hungary | 6 |
| Ireland | 1 |
| • Chile | 7 |
| Colombia | 3 |





AEROSURF® Phase 2b - Potential for Reduced Respiratory Support in Patients Who Failed nCPAP When on AEROSURF



In patients who failed nCPAP and required intubation and mechanical ventilation, AEROSURF treated patients appeared to require shorter duration of mechanical ventilation and time on supplemental oxygen



Phase 2b - Safety & Tolerability Profile Similar for Treatment and Control Populations

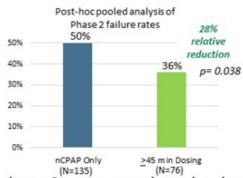
- The adverse event and serious adverse event profile was similar across the 3 groups
- Complications of prematurity were also similar

| | 40 mg/kg (25 min) | 80 mg/kg (50 min) | nCPAP Only |
|-------------------|----------------------|----------------------|------------|
| Acquired Sepsis | 12 (18%) | 13 (20%) | 16(25%) |
| Air Leak | 7 (11%) | 5 (8%) | 9 (14%) |
| Apnea | 29 (44%) | 23 (35%) | 24(38%) |
| PVL | 1 (2%) | 1(2%) | 1(2%) |
| PDA | 18 (27%) | 22 (33%) | 22 (34%) |
| IVH | 8 (12%) | 9 (14%) | 9 (14%) |
| NEC | 1(2%) | 7 (11%) | 6 (9%) |
| ROP | 2 (3%) | 6 (9%) | 2 (3%) |
| BPD | 7 (10%) | 8 (11%) | 9 (13%) |
| Alive without BPD | 58 (83%) | 57 (79%) | 53 (75%) |



Summary of Efficacy Signals in the Phase 2 Program

Post-hoc pooled analysis of patients in the phase 2 program (3 studies) treated in doses ≥ 45 minutes dosed as intended (uninterrupted) shows a notable reduction in nCPAP failure with AEROSURF® treatment compared to nCPAP controls

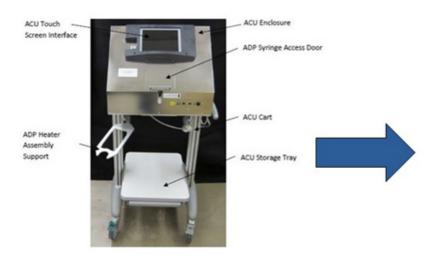


- Beneficial effects reproduced across the phase 2 program when the dose is delivered as intended
 - 2b results are consistent with previous data from the 2a study in 29-34 week GA infants (49% relative reduction in nCPAP failure for combined 45 and 60 minute doses)
- Phase 2a in 26-28 week GA infants also observed an important potential effect on development of BPD with 0% (0 of 24) in treated infants versus 25% (6 of 24) in control
- AEROSURF patients in the phase 2b study failing nCPAP required less time on oxygen and fewer days on mechanical ventilation



Evolution of Aerosolized Delivery System (ADS) from Phase 2 to the Next Generation, Phase 3 / "Go to Market" Device

Phase 2



- · 2012 2017
- Developed in conjunction with Battelle Memorial Institute (Battelle)
- Designed and used in prior phase 2 clinical experience
- · Battelle manufactures for phase 2 trials

Phase 3 / Commercial



- · 2018 and beyond
- Developing in collaboration with Battelle
- Designed for use in the phase 3 clinical trial and commercial application



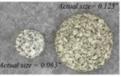
Complete Device Development and Transition to Next Generation ADS in 2Q 2018

Next Generation ADS Features

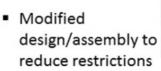
- Designed to utilize the same aerosol delivery technology to match important aerosol characteristics of emitted dose and particle size of the phase 2 device for bridging
- Enhanced ergonomics and user interface:
 - · Faster start-up and change-over
 - Built in step by step instructions with detailed images, if needed
- Simplified disposable set up to help prevent incorrect assembly and inadvertent re-use
- Enhanced controls and dose monitoring
- Modular design for easier maintenance, etc.

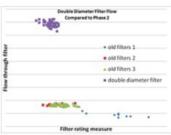


- Filter diameter doubled
 - Surface cross section increased by 4x



 New specifications for minimum flow through filter





- Test results thus far:
 - ~50 consecutive runs as part of engineering studies and design verification completed without filter clogging



AEROSURF® Clinical Development Next Steps for 2018

Generate the strongest possible position and transition to phase 3

Execute a Bridge Study to transition the new, Next Gen device in order to meet the following objectives:

- 1. Demonstrate adequate, consistent performance for the new Next Gen device
 - Beyond Device Design Verification and bench performance study, Windtree learns from actual "in-clinic" experience to ensure no issues
- 2. Sites gain experience with procedure and new device prior to FPI phase 3
- 3. Generate additional supportive 50 min dose data (and more intensive dosing)
 - Fourth data set at high dose is expected to provide data on safety of more intensive dosing and to augment phase 2b data that was impacted by removal of treatment interruptions in the pre-planned mITT



AEROSURF® Bridge Study

- Blinded study; nCPAP alone as control versus adding AEROSURF® treatment
- GA range: 26-32 weeks
- N=70 planned (35 per group) in a design similar to phase 2b
- ~20-25 select sites
 - represent the best previous study sites for enrollment and execution in phase 2 (predominately U.S. sites)
- Timing: 3 quarters in study duration starting in Q3 2018

- Dose: 50 min. with up to 4 repeat doses;
 minimum 20 minute wait between doses
 - Ph2b was 50 min. high dose, 2 repeats possible with a 2 hour wait between doses
- FiO₂ ≥ 25% to qualify, >21% for repeat dosing to allow infants to receive more treatments
- Key Measures:
 - CPAP failure assessed at 72 hours and 28 days
 - · Next Gen Device performance
 - Safety and tolerability
- Bridge Study not powered for significance, however we would like to show magnitude of effect >20%



Program Evolution and Changes Intended to Increase the Probability of Technical Success and Continue to Strengthened Data

- We have reproduced positive results in our Phase 2a and Phase 2b and have learning's to apply in trial design and execution
- Utilize the Next Gen ADS which is designed to mitigate the risk of filter related treatment interruptions
- Next Gen device features may support clinical outcomes:
 - Faster to use (time to initial treatment is believed to be meaningful)
 - Easier to use (human factor associated with the device experience may affect clinical decision making and resulting data)
- Given safety profile we are continually seeking to optimize dosing:
 - · Only studying high dose
 - Decreasing interval from 2 hours to 20 min. between doses with additional repeat doing possibilities
- FiO₂ at 25% for inclusion, >21% for repeat allows more infants to receive clinically needed repeat dosing
- Executing in our best sites (in the U.S. and select Poland)



Other Potential Development Activities

Lyophilized Lucinactant (LS)
 Preclinical Activities



Lyophilized Lucinactant A Second Asset Can Expand the Opportunity

Lyophilized Lucinactant LS



Characteristics

- Lyophilized dosage form of our KL4 surfactant drug product that was previously approved by the FDA as a liquid dosage form
- Currently used in AEROSURF® development program
- Improvements and benefits (besides being fully synthetic vs. animal-derived) include lower viscosity, stability expected at 3 years+, cold chain but no need for warming, potential for room temperature in clinic stocking

Development Plan

- Plan for Phase 3 in RDS (liquid bolus application)
 - Obtain regulatory advice on trial design and approval requirements in 1H 2018
- Potential to develop for other future indications where aerosolized KL4 is not indicated (i.e., where patient are intubated for their condition, etc.)

Value to Windtree

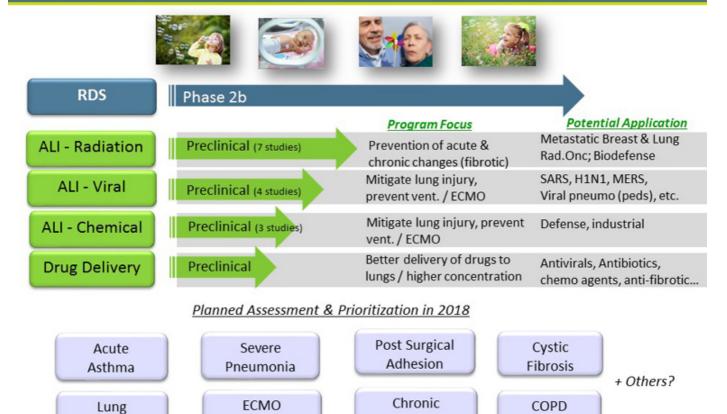
- Strengthen RDS position as a provider for all surfactant needs and compete in 100% of market and clinical pathways (noninvasive and invasive)
- May enhance Windtree's RDS offering with a second product based on the same drug being studied in AEROSURF and previously approved as SURFAXIN®
- LS for bolus application gives Windtree a platform for non-aerosolized applications



Leverage our Innovative Technology to Advance Acute Pulmonary Disease Care and Outcomes Beyond RDS

Liberation

Transplant



Sinusitis

Platform Exclusivities Broad Multi-Faceted Exclusivity Portfolio

Regulatory Exclusivities

• Orphan Drug Designation in RDS for the U.S. and EU

EUROPEAN MEDICINES AGENCY

Patents

- Lyophilized KL4 Surfactant Portfolio to 2033
- Aerosol Delivery System Portfolio through 2031+

Trade Secrets/Know-How

- Methods of Manufacture
- Non-USP Analytical Processes



Potential Challenges to Generic Entry

 Conventional bioequivalence studies are not relevant as Surfactants are Non-Receptor Based



Q4 2017 Financial Restructuring Initiative

Rationale

- Our KL4 platform assets represent a significant opportunity, however significant additional investment is required to advance and realize the full potential of these assets
- Securing the required additional capital had been a challenge due in significant part to the financial overhang of \$25MM of secured debt, with the first installment of \$12.5MM due in February 2018
- Improving the Company's balance sheet and capital structure has been a critical success factor to better enable the prospects for long-term financial stability

Strategy

Execute a broad financial restructuring initiative via strategic transaction

- Rapidly secure the cash needed to fund operations with a focus on maintaining our assets and advancing the AEROSURF® program
- Remove the financial overhang caused by long-term debt; address the barrier to further funding by retiring the debt
- 3. Lower ongoing, non-program related cash burn
- Better position Windtree for growth and longer term stability

Elements of the Q4 2017 Transactions

1 Lee's Share Purchase

- Lee's purchased \$10 million of common stock
- Lee's owns approximately 73% of currently outstanding Windtree shares of common stock

Deerfield Debt Retirement

- Deerfield agreed to restructure and retire its \$25 million secured loan to facilitate the Lee's share purchase. In exchange for the retirement of debt, Deerfield received:
 - \$2.5 million of share purchase proceeds
 - Windtree common stock representing 2% ownership on a fully-diluted basis
 - up to \$15 million in future AEROSURF regulatory and commercial milestones beginning with filing for U.S. marketing approval

Battelle Collaboration Development Payables

 Battelle (our medical device partner) agreed to restructure payment terms of existing payables to minimize cash payments



Results and Benefits of the Restructuring Initiative

- ✓ Significantly improved capital structure by removing-the financial overhang of long-term debt
- ✓ Lowered the ongoing, non-program related cash burn rate through a combination of a 40% headcount reduction and other cost cutting measures
- ✓ Better positioned to access new capital including potentially with China / Hong Kong capital markets and investors
- ✓ Windtree becomes part of a well respected and resourced, global organization that is committed to building the KL4 platform and Windtree; expands our revenue potential and opportunities to diversify and build a broader portfolio



Stated Rationale and Intent of Lee's

High belief in the assets and program

- Dr Li, CEO of Lee's Pharm, has followed Windtree for some time and is compelled by the synthetic surfactant platform (both aerosolized and nonaerosolized in RDS as well as other potential indications) and the significant opportunity it represents in China and globally
- Attracted to the balanced investment / balanced risk approach of having three separate assets including an approved product, a new, better formulation in LS and the potentially game-changing AEROSURF program
- Desire for globalization from a major interest in a U.S. public company to build and access to new capital markets. Specifically, Windtree is expected to be an attractive way to achieve this because:
 - They see a significant opportunity to gain this position at good value, clean up the capital structure and make healthy, and have a management team and assets they know and believe in
- 3. Moving forward intent Execute programs, potential to diversify with new assets and build a valuable business



2017 - A Productive Year for Windtree



2018 Objectives





Complete Device Development delivering an extremely consistent, high performing Phase 3 / "go to market" drug delivery platform





Solid execution in the clinic with the Bridge Study





AEROSURF and Lyo Lucinactant LS

Global Regulatory Clarity and employed
in development





Successful funding supporting a financially healthy organization

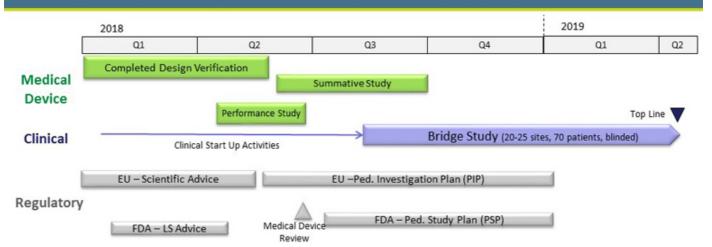




Investment / Portfolio **Diversification** by potentially accessing assets within the Lee's Pharm organization and Lyo Lucinactant LS



AEROSURF® Development and Deliverables Overview



1H 2018

- ✓ Next Gen Device DV
- ✓ Device Performance Study results
- ✓ Bridge Study (and Summative Study) start-up
- ✓ Regulatory Milestones:
 - · EMA Scientific Advice
 - FDA Device
 - FDA Lyo Lucinactant LS
- √ Address existing obligations

2H 2018 / Mid-2019

- ✓ Bridge Study top-line data
- ✓ FDA End of Phase 2 Meeting
- Summative Study results
- ✓ EU PIP
- ✓ FDA PSP
- ✓ Ph 3 start-up



Note: The above schematic represents Windtree's current business planning, execution and intent. Start and completion timing for many activities are dependent upon the timely competion of other tasks (i.e. study start dependent on device availability) and sufficient available funds.

Value Creating Potential



- Potentially transformative therapy addressing both the unmet efficacy and safety needs in the important, acute neonatology market
- Multiple phase 2 clinical trials producing and replicating efficacy while continuing to build safety and tolerability data base
- Developing positive health economic position as well as opportunity to expand the use of surfactants due to easier, less specialized administration
- Broad IP with potential to build a pipeline of KL4 surfactant therapies to address a variety of respiratory diseases
- Fast Track and Orphan designations
- Part of a highly capable, diverse, global pharmaceutical company committed to the build and growth of Windtree



Windtree Therapeutics



"Striving to deliver Hope for a Lifetime!"

