Delivering New Therapies to Essential Areas in Dermatology

Jefferies Healthcare Conference

June 5, 2019
Disclaimer

This presentation contains "forward-looking" statements that are based on our management’s beliefs and assumptions and on information currently available to management. Forward-looking statements include all statements other than statements of historical fact contained in this presentation, including information concerning our business strategy, objectives and opportunities; market sizes and potential market growth opportunities; future business and product development, clinical and regulatory plans and anticipated timing with respect to such plans; product goals, attributes and performance; the successful completion of, and timing expectations for the receipt and announcement of topline efficacy and safety data from, our clinical trials. Forward-looking statements are subject to known and unknown risks, uncertainties, assumptions and other factors that may cause our actual results, performance or achievements to differ materially and adversely from those anticipated or implied by our forward-looking statements, including, but not limited to, those related to the successful development, regulatory approval and commercialization of our product candidates; the costs of our development programs; our ability to obtain necessary additional capital; the design, implementation and outcomes of our clinical trials, including related to further analysis of the results of our studies; the outcomes of meetings with regulatory agencies; our dependence on the Service Agreement with Cosmo Pharmaceuticals and our dependence on third-party clinical research organizations, manufacturers and suppliers; market acceptance of our potential products; our ability to develop and maintain collaborations and license products and intellectual property; the impact of competitive products and therapies including generics; our ability to manage the growth and complexity of our organization; our ability to maintain, protect and enhance our intellectual property; and our ability to continue to stay in compliance with applicable laws and regulations. You should not rely upon forward-looking statements as predictions of future events. Neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update any forward-looking statements after the date of this presentation except as may be required by law.

This presentation may also contain estimates and other statistical data made by independent parties and by us relating to market size and growth and other data about our industry. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Projections, assumptions and estimates of the future performance of the markets in which we operate are necessarily subject to a high degree of uncertainty and risk. The trademarks included herein are the property of the owners thereof and are used for reference purposes only.

We use our website (www.cassiopea.com) as channels of distribution of information about our company, product candidates, planned announcements, attendance at upcoming conferences and other matters. Such information may be deemed material information and we may use these channels to comply with our disclosure obligations. Therefore, investors should monitor our website in addition to following our press releases, public conference calls and webcasts.
Cassiopea Overview

- Publicly traded on SIX - Cosmo Pharma holds 45.1%
- Innovative late stage pipeline of 4 dermatology NCE products
- Filing NDA June/July - Winlevi (clascoterone cream) - First in Class Topical Androgen Receptor (AR) Inhibitor Targeting Acne
- Establishing a leading US commercial organization upon Winlevi® approval & partner in ROW
## Cassiopea Pipeline

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>INDICATION</th>
<th>PRE-CLINICAL</th>
<th>PHASE I</th>
<th>PHASE II</th>
<th>PHASE III</th>
<th>NEXT MILESTONE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winlevi</strong></td>
<td>Acne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NDA Filing Q2/Q3 2019</td>
</tr>
<tr>
<td>Clascoterone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Androgen Receptor Inhibitor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Breezula</strong></td>
<td>Androgenetic Alopecia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Initiate POC in Women &amp; PH III in Men Q3/Q4 2019</td>
</tr>
<tr>
<td>Clascoterone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Androgen Receptor Inhibitor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CB-06-01</strong></td>
<td>Acne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PH II DR Data H2 2020</td>
</tr>
<tr>
<td>Antibiotic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CB-06-02</strong></td>
<td>Genital Warts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PH II DR Data H2 2020</td>
</tr>
<tr>
<td>Immune Modulator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Winless
clascoterone cream 1%

First in Class Topical Androgen Receptor (AR) Inhibitor Targeting Acne
Acne is a medical condition affecting 60 Million people in the US

Acne is a $5 BILLION market

Topical options address 3 of 4 factors in acne pathophysiology, leaving a gap in treatment regimens

Treatment options are limited to old therapies developed over 30 years ago

Payors continue to cover acne as a medical condition and all research indicates that this will not change

90% of branded prescriptions for acne are written in the Dermatology office

Average branded topicals have annual net revenues of $200-400MM
Acne is often treated by polypharmacy in order to address multiple pathways of the disease.

### Treatment Categories by 4 Key Elements of Acne Pathogenesis

#### Drugs that normalize follicular keratinization
- Retinoids
- Isotretinoin

#### Drugs with anti-inflammatory effects
- Retinoids
- Antibiotics
- Corticosteroids

#### Drugs with antibacterial effects
- Benzoyl Peroxide
- Antibiotics
- Antandrogen
- Isotretinoin

#### Drugs that inhibit sebaceous gland function
- Antandrogen
- Corticosteroids
- Estrogens
- Isotretinoin

Clascoterone is the only topical that may effect both sebum and inflammation.
Clascoterone is anticipated to be a first in class Androgen Receptor (AR) Inhibitor

Acne Pathogenesis

DHT  Clascoterone  Sebum Production  Inflammation  Acne Lesion
Winlevi Phase III Program Design

12-week, randomized, double-blind, vehicle controlled, in subjects with moderate-to-severe acne; followed by 9 month open label safety extension

- **Self-apply, twice daily, in the morning and evening, for 12 weeks**
- **Inclusion criteria**
  - 30-75 inflammatory and 30-100 non-inflammatory lesions
  - IGA 5 point scale – Moderate or Severe (Grade 3 or 4)

**Co-Primary Efficacy Endpoints**
- Proportion of subjects in each group with at least a two point reduction in IGA from baseline and an IGA score of 0 (clear) or 1 (almost clear) at week 12
- Absolute change from baseline in non inflammatory lesion counts (NILC) at Week 12
- Absolute change from baseline in inflammatory lesion counts (ILC) at Week 12

<table>
<thead>
<tr>
<th>Studies 25 and 26 Double-blinded Phase</th>
<th>Study 27 Open Label Safety Extension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomized (1:1), double-blind, N = 1,440</td>
<td>Subjects who completed one of the randomized trials, N = 607</td>
</tr>
<tr>
<td>Winlevi clascoterone 1% cream</td>
<td>Winlevi clascoterone 1% – 9 months of treatment</td>
</tr>
<tr>
<td>12 weeks of treatment</td>
<td></td>
</tr>
</tbody>
</table>

Baseline | End of treatment | 12 Months

- Week 3
- Week 6
- Week 9
- Week 12

Confidential | © 2019 Cassiopea. All Rights Reserved.
In Phase 3 trials Winlevi demonstrated statistically significant efficacy in primary endpoints with side effects similar to vehicle.

**Winlevi Safety and Efficacy (Primary Endpoints) ITT (Week 12)**

**2 Point Reduction in IGA & IGA score of 0 (clear) or 1 (almost clear)**

<table>
<thead>
<tr>
<th>Study 25</th>
<th>Study 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients (%)</td>
<td></td>
</tr>
<tr>
<td>8.9%</td>
<td>4.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Winlevi</th>
<th>Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>0.0008</td>
<td>&lt;0.0001</td>
</tr>
</tbody>
</table>

**Absolute change from baseline in non-inflammatory lesion count**

<table>
<thead>
<tr>
<th>Study 25</th>
<th>Study 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients (%)</td>
<td></td>
</tr>
<tr>
<td>18.8%</td>
<td>18.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in Lesion Count</th>
<th>Study 25</th>
<th>Study 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>-19.4</td>
<td>-19.4</td>
<td></td>
</tr>
</tbody>
</table>

| P | <0.0001 | <0.0001 |

**Absolute change from baseline in inflammatory lesion count**

<table>
<thead>
<tr>
<th>Study 25</th>
<th>Study 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients (%)</td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Change in Lesion Count</th>
<th>Study 25</th>
<th>Study 26</th>
</tr>
</thead>
<tbody>
<tr>
<td>-19.4</td>
<td>-20.0</td>
<td></td>
</tr>
</tbody>
</table>

| P | <0.0001 | <0.0001 |

**Adverse Events**

- There were no treatment-related serious adverse events among patients treated with clascoterone.
- Local skin reactions, if present, were predominantly classified as mild.

**Sample Size**

- Study 25: N = 708
- Study 26: N = 732
In Phase III trials Winlevi demonstrated statistically significant efficacy in secondary endpoints with side effects similar to vehicle.

**Clascoterone Safety and Efficacy (Secondary Endpoints) ITT (Week 12)**

**Percent reduction from baseline in total lesion count**
- Study 25: -37.1% (P = 0.0016)
- Study 26: -37.7% (P < 0.0001)

**Percent reduction from baseline in non-inflammatory lesion count**
- Study 25: -30.7% (P = 0.0141)
- Study 26: -29.3% (P < 0.0001)

**Percent reduction from baseline in inflammatory lesion count**
- Study 25: -44.8% (P = 0.0070)
- Study 26: -47.0% (P < 0.0001)

**Adverse Events**
- There were no treatment-related serious adverse events among patients treated with clacoterone.
- Local skin reactions, if present, were predominantly classified as mild.

**Sample Size**
- Study 25: N = 708
- Study 26: N = 732
Phase 3 trials across 1,440 patients demonstrated side effects similar to vehicle

9 month Open Label Extension Study shows consistent results with Phase 3 trials

✦ Consistent with previous studies, erythema/reddening was the most common local skin reaction
✦ No systemic side effects were noted
✦ The mean absolute changes of cortisol values throughout the study were similar among groups, proving no systemic effect on cortisol

Pooled Safety Data – TEAE* Study 25, 26

*Treatment Emergent Adverse Events
Winlevi Phase III Open Label Extension Study
Efficacy Summary

Percentage of Subjects with IGA Scores of 0 or 1 Over Time

<table>
<thead>
<tr>
<th>Month</th>
<th>Face</th>
<th>Trunk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Month 3</td>
<td>13.6%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Month 6</td>
<td>28.7%</td>
<td>44.5%</td>
</tr>
<tr>
<td>Month 9</td>
<td>48.1%</td>
<td>52.3%</td>
</tr>
</tbody>
</table>

Safety Population, N=607
Physicians and Payors show positive response to Winlevi Product Profile

- 69% of Physicians indicated they perceived Winlevi to be highly favorable, very highly favorable or extremely favorable
  - Physicians anticipate using Winlevi first line for mild-moderate patients and second line for severe patients
  - Dermatologists estimate prescribing to be more often than topical antibiotics or benzoyl peroxide.

- Preliminary Payor interview show coverage for a novel mechanism of action in acne with guidance to price within the range of other topical acne brands ($400-$700 WAC)

Commercial Launch Preparedness

1. Ensure Operational readiness to support launch and future growth of Cassiopea

2. Educate and generate awareness on benefits of Androgen Receptor Inhibition

3. Lay the foundation for rapid adoption of Winlevi at launch

4. Secure provider and patient access to Winlevi

Critical Success Factors for Winlevi Launch
Winlevi

Early 2019 Achievements:

✧ Received conditional approval from FDA on Winlevi proprietary name
✧ 17 Published Papers, Posters and Abstracts
✧ 20 Meetings Sponsorships
✧ 40 Podium Mentions
✧ Secured Agency of Record and Public Relations
✧ Initiated second round of market access research

Next Steps:

✧ NDA Filing
  ▪ Pre NDA meeting held May 6, 2019
  ▪ File NDA June/July 2019
First in Class Topical Androgen Receptor (AR) Inhibitor Targeting Androgenetic Alopecia
Androgenetic alopecia, also known as pattern baldness, is characterized by the progressive loss of terminal hairs on the scalp in a characteristic pattern. It is caused by high concentrations of dihydrotestosterone (DHT) at the hair-follicle, which shortens the hair growth cycle.

Known psychosocial complications of androgenetic alopecia include depression, low self-esteem, and less frequent and enjoyable social engagement. Studies have indicated that women are more likely to suffer from psychological complications than men.

80-95 million Americans suffer from Androgenetic alopecia. Both men and women are impacted. Only 4-9 million patients are estimated to get treatment.
Breezula stacks up well against existing options

Normal hair follicle  | Follicle shrinking causing hair thinning  | Small follicle unable to grow new hair

✦ Shows anti-androgenic activity on follicle
✦ However, serious side effects due to hormonal imbalance
✦ Not indicated for women

Existing Treatments

Propecia
✦ Shows anti-androgenic activity on follicle
✦ However, serious side effects due to hormonal imbalance
✦ Not indicated for women

Minoxidil
✦ Shows a vasodilator effect, ensuring a better flow of nutrients to the papilla

Breezula®
✦ Antagonizes DHT’s negative effects on dermal papilla
✦ Reduces hair miniaturization
✦ Reduces dermal inflammation

A Novel Androgen Receptor Inhibitor

DHT = Dihydrotestosterone

Breezula

Confidential | © 2019 Cassiopea. All Rights Reserved.
Breezula Phase II Dose Ranging Study Design

**Study 034**
52-week, randomized, double-blind, vehicle controlled, in subjects with AGA

**Double-blinded Phase II DRS**
Randomized (1:1:1:1), double-blind versus Vehicle, N = 404

12 months of treatment with planned 6 months interim analysis

- DRS Phase II: 404 patients enrolled, double blind, 5 parallel arms, Breezula 2.5%, 5%, 7.5%, vehicle BID plus 7.5% QD, 52 weeks of treatment, co-primary endpoints on TAHC total hair count increase from baseline and HGA patient satisfaction

- The Modified Norwood-Hamilton Scale is used to assess the eligibility of subjects at the Screening Visit
  - Subject has to have mild to moderate androgenic alopecia in temple and vertex region rating Modified Norwood-Hamilton Scale III vertex to V (IIIv, IV, V) with ongoing hair loss to be eligible for this study

- Six month interim results July 2018, twelve month results April 2019
## Breezula Phase II Dose Ranging Study Demographics

### Primary Population - PP Population

<table>
<thead>
<tr>
<th></th>
<th>Breezula 2.5% BID (N = 74)</th>
<th>Breezula 5% BID (N = 66)</th>
<th>Breezula 7.5% BID (N = 68)</th>
<th>Breezula 7.5% QD (N = 66)</th>
<th>Vehicle (N = 70)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Baseline Age</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>40.4</td>
<td>42.3</td>
<td>38.8</td>
<td>39.4</td>
<td>39.3</td>
</tr>
<tr>
<td>Median</td>
<td>40.5</td>
<td>43.0</td>
<td>39.0</td>
<td>40.0</td>
<td>40.0</td>
</tr>
<tr>
<td>Range (min-max)</td>
<td>21-55</td>
<td>24-55</td>
<td>21-55</td>
<td>21-54</td>
<td>21-55</td>
</tr>
<tr>
<td><strong>Baseline Norwood-Hamilton Scale:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III/IV</td>
<td>37.8%</td>
<td>30.3%</td>
<td>48.5%</td>
<td>42.4%</td>
<td>31.4%</td>
</tr>
<tr>
<td>IV</td>
<td>37.8%</td>
<td>50.0%</td>
<td>25.0%</td>
<td>39.4%</td>
<td>42.9%</td>
</tr>
<tr>
<td>V</td>
<td>24.3%</td>
<td>19.7%</td>
<td>26.5%</td>
<td>18.2%</td>
<td>25.7%</td>
</tr>
</tbody>
</table>

**Total number of subjects**: 344

**Mean age**: 40.0

**Norwood-Hamilton Scale**: III/IV=38.1%  IV=39.0%  V=23.0%

**Ethnicity**: Hispanic/Latin=2.3%  Not Hispanic/Latin=97.7%
Breezula Phase II Dose Ranging Study

Target Area Hair Count – Absolute Values (PP)

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Month 3</th>
<th>Month 6</th>
<th>Month 9</th>
<th>Month 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>BID 2.5%</td>
<td>158</td>
<td>161</td>
<td>159</td>
<td>167</td>
<td>172</td>
</tr>
<tr>
<td>BID 5.0%</td>
<td>173</td>
<td>180</td>
<td>177</td>
<td>183</td>
<td>173</td>
</tr>
<tr>
<td>BID 7.5%</td>
<td>185</td>
<td>185</td>
<td>193</td>
<td>199</td>
<td>191</td>
</tr>
<tr>
<td>OD 7.5%</td>
<td>158</td>
<td>166</td>
<td>163</td>
<td>165</td>
<td>167</td>
</tr>
<tr>
<td>BID Vehicle</td>
<td>173</td>
<td>170</td>
<td>163</td>
<td>160</td>
<td>157</td>
</tr>
</tbody>
</table>

BID = Twice Daily
Breezula Phase II Dose Ranging Study

Target Area Hair Count – Changes vs Baseline (PP)

BID BID BID OD BID

2.5% 5.0% 7.5% 7.5% Vehicle

Target Area Hair Count – Changes vs Baseline (PP)

BID

2.5%

BID

5.0%

BID

7.5%

OD

7.5%

BID

Vehicle

Significance vs baseline

Month 3

Month 6

Month 9

Month 12

Confidential | © 2019 Cassiopea. All Rights Reserved.
Breezula Phase II Dose Ranging Study

Target Area Hair Count – Changes vs Vehicle (PP)

2.5% BID
5.0% BID
7.5% BID
7.5% OD

Significance vs vehicle
Phase II Dose Ranging Study

Hair Growth Assessment - Month 12 (PP)

- 2.5% BID: 61% Positive, 39% Negative
- 5% BID: 60% Positive, 40% Negative
- 7.5% BID: 62% Positive, 38% Negative
- 7.5% QD: 56% Positive, 44% Negative
- Vehicle BID: 50% Positive, 50% Negative

Zero as Negative Result
Phase II Dose Ranging Study Safety Summary — Side effects similar to vehicle

- TEAE were similar across all treatment groups and similar to vehicle
- Most TEAE were moderate in severity
- Most TEAE were not related to study drug
- No serious TEAE were observed in 7.5% BID clascoterone group
Providers and Patients are excited about Breezula

✦ HCPs were highly receptive to the product profile, emphasizing the novel mechanism and impressive clinical photographs
  - All provider specialties suggest high utilization with a reported adoption of over 60% of male patients and 50% of female patients
  - Physicians reported high adoption rates and would take replace finasteride and minoxidil equally

✦ Nearly half of Rogaine patients indicated that they would be at least highly likely to request Breezula from their physician

✦ Breezula could be priced like other cash pay lifestyle drugs ie $100-200 per month
Breezula

Early 2019 Achievements:

✦ Published Mechanism of Action Manuscript
✦ 9 Published Papers, Abstracts and Posters
✦ Late Breaker Poster and Presentation at 2019 AAD
✦ Study design for POC in women complete

Next Steps:

✦ Clinical and Regulatory Pathway:
  ▪ Q3 Initiate Breezula POC trial in Women
  ▪ Q4 Breezula End of Phase 2 Meeting w FDA
  ▪ Q4 Initiate Breezula Phase 3 trials
Exciting Time at Cassiopea

✧ New corporate campaign
✧ Expanding footprint in Dermatology
✧ Late stage development projects are progressing on schedule
✧ Continued interest and investment into our early stage development pipeline
✧ Poised to be the next leader in Dermatology
Key Milestones 2019

- June/July File NDA Winlevi
- Q3 Initiate Breezula POC trial in Women
- Q4 Breezula End of Phase II Meeting w/ FDA
- Q4 Initiate Breezula Phase III trials
Cassiopea SpA

Information

Number of shares: 10,000,000

Listing: SIX Swiss exchange, Main board

ISIN: IT0005108359

Ticker: SKIN

Contacts

Diana Harbort, CEO
dharbort@cassiopea.com

Chris Tanner, CFO
c Tanner@cassiopea.com