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

Form 6-K

Report of Foreign Private Issuer Pursuant to Rule 13a-16 or 15d-16 under the Securities Exchange Act of 1934

For the month of: February 2023

Commission file number: 001-36288

# AKARI THERAPEUTICS, PLC

(Translation of registrant's name into English)

75/76 Wimpole Street London W1G 9RT

United Kingdom (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F ⊠ Form 40-F □

On February 15, 2023, Akari Therapeutics, Plc, a public company with limited liability incorporated under the laws of England and Wales (the "<u>Company</u>"), posted an updated investor presentation on its website. A copy of the Company's presentation is furnished as Exhibit 99.1 to this Report on Form 6-K and is incorporated herein by reference.

The information in slide 23 of such presentation is hereby incorporated by reference into all effective registration statements filed by the Company under the Securities Act of 1933, as amended.

# Exhibit

No.

<u>99.1</u> <u>Slide Presentation.</u>

# **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, thereunto duly authorized.

Akari Therapeutics, Plc (Registrant)

By: /s/ Rachelle Jacques Name: Rachelle Jacques

Title: President and Chief Executive Officer

Date: February 15, 2023





# **Forward-Looking Statements**



Certain statements in this presentation constitute "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements reflect our current views about our plans, intentions, expectations, strategies an prospects, which are based on the information currently available to us and on assumptions we have made. Although we believe that our plans, intentions, expectations or strategies will be attained or achieved. Furthermore, actual results may differ materially from those described in the forward-looking statements and will be affected by a variety of risks and factors that are beyond our control. Such risks and uncertainties for our company include, but are not limited to needs for additional capital to fund our operations; our ability to continue as a going concern; uncertainties of cash flows and inability to methy an inability to successfully develop nomacopan as a treatment for COVID-19 related pneumonia and to successfully commercialize any product in that indication; our ability to obtain orphan drug designation in additional indications; risks inherent in drug development in general, and risks specific to the development of potential treatments for COVID-19-related illnesses; uncertainties in obtaining value of nomacopan and any other product candidates and unexpected costs that may result from difficulties involved in successfully bringing product candidates to any any other product candidates and unexpected costs that may result from difficulties involved in successfully bringing product candidates to market; inability to develop new product candidates and support existing product candidates; the approval by the FDA and EMA an any other similar foreign regulatory authorities of other competing or superior products brought to market; risk sand as support, inskerseulting from unforce patents another intellectual property rights or the unexpected costs associated with the impact of the outbreak o

The statements made in this presentation speak only as of the date stated herein, and subsequent events and developments may cause our expectations and beliefs to change. Unless otherwise required by applicable securities law, we do not intend, nor do we undertake any obligation to update or revise any forward-looking statements contained in this presentation to reflect subsequent information, events, results or circumstances or otherwise. While we may elect to update these forward-looking statements publicly at some point in the future, we specifically disclaim any obligation to do so, whether as a result of new information, future events or otherwise, except as required by law.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of such products.

This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or other jurisdiction.

Aka	ari Overview							
1	Novel bispecific recombinant protein targeting both complement C5 and leukotriene B4 (LTB4)							
2	Broad therapeutic potential due to bispecific mechanism of action and multiple routes of administration (subcutaneous, topical, intravitreal, intravenous)							
3	Advanced late-stage program with extensive clinical and safety data							
4	Lead indication in pediatric hematopoietic stem cell transplant-related thrombotic microangiopathy (HSCT-TMA) accelerated into pivotal Part B of Phase 3 clinical trial; granted Orphan and FDA Rare Pediatric Disease Designation (Priority Review Voucher eligible at approval)							
5	Significant unmet need in both adult and pediatric HSCT-TMA with ~80% mortality rate and no approved therapies; added new pipeline program in adult HSCT-TMA, which will support both adult and pediatric regulatory pathways							
6	Pre-clinical program investigating long-acting PAS-nomacopan in geographic atrophy (GA) with potential to reduce sight-threatening choroidal neovascularization (CNV) risk via LTB4 inhibition and target dose interval beyond 3 months; IND submission first half of 2024							

# Nomacopan Is a Novel Bispecific Recombinant Protein





# Nomacopan Inhibits Cell Activation, Lysis and Inflammation Preserving Opsonization and Clearance of Immune Complexes



- Specifically prevents activation of C5 and binds LTB4, preventing proinflammatory and potentially tissuedamaging effects mediated by C5a, the MAC and LTB4<sup>1</sup>
- Opsonization and role of complement in clearance of immune complexes remain intact
- Inhibiting C5 activation prevents formation of the MAC and C5a that signals through 2 cell surface G protein-coupled receptors (GPCRs)
- Sequestering LTB4 prevents interaction of proinflammatory eicosanoid with cell surface GPCRs (BLT1 high affinity and BLT2 low affinity)



# LTB4 & C5 Are Separate Pathways But In Vivo Data Point to Signalling Interplay That Leads to Damaging Inflammation



#### In vivo study of autoantibody-induced inflammatory arthritis<sup>1, 2</sup>

· Neutrophils infiltrate joints by way of multiple chemoattractant

receptors, including LTB4 (BLT1) and chemokine receptors

In the joint, neutrophils perpetuate their own recruitment by

#### In vivo study of immune complexinduced acute lung injury (IC-ALI)<sup>3</sup>

- C5 and LTB4 contribute equally to this model of IC-ALI . •
  - C5a receptor signaling regulates Fc receptors promoting inflammation
- Activated alveolar macrophages produce proteases, cytokines & LTB4 C5a and LTB4 receptor activation upregulate adhesion molecules, recruit &
- . releasing LTB4 and IL-1 $\beta$ degranulate neutrophils releasing super-oxides, causing further Complement C5aR activation of neutrophils is required for LTB4 release and early neutrophil recruitment into the joint





#### References

- Sadik CD, et al. Neutrophils orchestrate their own recruitment in murine arthritis through C5aR and FcyR signaling. Proc Natl Acad Sci U S A. 2012;109(46):E3177-E3185. Sadik CD et al. Lipid-cytokine-chemokine cascades orchestrate leukocyte recruitment in inflammation. J Leuk Biol. 2012; 91(2:207-215.; Roversi P, et al. Bifunctional lipocalin ameliorates murine immune complex-induced acute lung injury. J Biol Chem. 2013;288(26):18789-18802
- 1. 2. 3.

# Near-Term Potential, Promising Pre-Clinical Program



Indication	Candidate/ Formulation	Designations	Pre-Clinical	Phase 1	Phase 2	Phase 3 Parts A & B
Pediatric hematopoietic stem cell transplant– related thrombotic microangiopathy (HSCT-TMA)	Nomacopan/ subcutaneous	FDA Orphan Drug, Fast Track and Rare Pediatric Disease designations				Advancing to pivotal Part B in >2 years age cohorts, on track to begin enrollment in Q4. Part A remains open for enrollment in <2 years age cohort.
Adult hematopoietic stem cell transplant– related thrombotic microangiopathy (HSCT-TMA)	Nomacopan/ subcutaneous	FDA Orphan Drug Designation			Study enrollment expected to open in 2024	
Geographic atrophy (GA)	Long-acting PAS-nomacopan/ intravitreal injection		IND filing expected in 1H 2024			

# Previous Areas of Clinical Development, Including PNH and BP, Support Current Development Pathways



- In addition to current areas of focus, Akari has conducted clinical research in several other areas, including Phase 2/3 clinical • trials of subcutaneous nomacopan for treatment of bullous pemphigoid (BP) and paroxysmal nocturnal hemoglobinuria (PNH)
- This research set a solid foundation for the current Phase 3 clinical trial in pediatric HSCT-TMA
- In a Phase 3 study in PNH, 100% of untreated patients were transfusion dependent while 0% of nomacopan patients were transfusion dependent
- In clinical studies of nomacopan in BP, 7 of 9 patients responded to nomacopan<sup>1</sup>
- >32 patient years of nomacopan exposure in PNH in 19 patients
- o 3 showed >80% reduction in BPDAI by day 42 (BP disease activity)

Proportion of PNH patients who were transfusion independent following entry to trial





1. Sadik CD, et al. Evaluation of nomacopan for treatment of bullous pemphigoid a phase 2a non0randomized controlled trial. JAMA Dermatol. 2022; 158: 641-649







# Nomacopan May Be the First Treatment for Pediatric HSCT-TMA, a Condition with Mortality Up to 80%





- · TMA following a stem cell transplant procedure is a rare but serious complication of HSCT that appears to involve complement activation, inflammation, tissue hypoxia and blood clots, leading to progressive organ damage and death
- · Mortality in patients who develop severe transplantrelated TMAs is 80% (across both adults and children)<sup>1</sup>
- Currently, there are no approved treatment options in the U.S. or Europe

- Rosenthal J. Hematopoletic cell transplantation-associated thrombotic microangiopathy: a review of pathophysiology, diagnosis, and treatment. J Blood Med. 2016;7:181-168, Published 2016 Sep. 2
   Jodels S. et al. Eculizzmab Imerary in children with severe hematopoletic stem cell transplantation-associated thrombotic microangiopathy. *Biol Blood Marrow Transplant*, 2014;20(4):518-525.
   Licht C, et al. Efficacy and stelley of eculizzmab in atypical hemolytic uremic syndrome from 2-year extensions of phase 2 studies. *Kitney Int*, 2015;87(5):1061-1073.
   Greenbaum LA, et al. Eculizzmab is a safe and effective treatment in pediatric patients with atypical hemolytic uremic syndrome. Kidney Int. 2016;87(5):1061-1073.
   Schots S, Num MA, Mackie I et al. Successful treatment of Plotpath patient non-responsive to eculizumab with novel complement C5 inhibitor covers (normacopan). *Br J Hematol.* 2020; 188: 332-340.
   Jodels S, et al. Complement blockade for TA-TMX: lessons learned from a large pediatric cohort treated with eculizumab. *Biod.* 2020; 135(13):104-1057.
   Takatsuka, H, et al. Proficient tip the severity of intestinal graft-versus-host disease from leukotriene B4 levels after bone marrow transplantation. *Bone Marrow Transplant.* 2002;42(12):1313-1316.

## 1. Efficacy

Efficacy of complement C5 inhibition by eculizumab is established in HSCT-TMA<sup>2</sup> and atypical hemolytic uremic syndrome (aHUS) <sup>3,4</sup>, another TMA (eculizumab); efficacy of nomacopan C5 inhibition supported by clinical PNH research<sup>5</sup>

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#### 2. Dosing

Nomacopan clinical trials are establishing a simple, fixed dose for each age category; rapid offset of action allows complement re-activation if/when needed

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#### 3. GVHD \_\_\_\_\_

Graft versus host disease (GVHD) is commonly present in patients with severe HSCT-TMA<sup>6;</sup> LTB4 is often elevated in patients with GVHD and inhibition of LTB4 may slow GVHD progression<sup>7</sup>



Acceleration into pivotal, registrational Phase 3 Part B

**2** Addition of new pipeline program in adult HSCT-TMA

**3** Phase 3 Part A to remain open for youngest pediatric patients

Based on FDA Type C guidance Akari is moving forward into design and planning for pivotal Part B of the Phase 3 clinical trial of nomacopan for treatment of pediatric HSCT-TMA in patients between 2 years and <18 years of age Akari is initiating a new pipeline program for development of nomacopan as a potential treatment for adults with HSCT-TMA, which will include a study supportive of both adult and pediatric regulatory pathways; adult HSCT-TMA population is >10 times the pediatric population

Since enrollment for the youngest age group (aged 0.5 to <2 years) in the Part A study is not complete, Akari is keeping the study open for these young pediatric patients while advancing pivotal Part B study in the older pediatric patients; full data readout upon Part A completion

# **Program Acceleration in Pediatric HSCT-TMA**





Pediatric HSCT-TMA Phase 3 Advancing Into Pivotal Stage; Adult Phase 2 Supportive of Pediatric Program



	Phase 3 Part A		Phase 3 Part B		NDA
Phase 3 Clinical Trial in Pediatric HSCT- TMA	<ul> <li>Dose confirmation/safety</li> <li>Sites in US, UK, Poland</li> <li>Severe HSCT-TMA in 3 age cohorts         <ul> <li>0.5 to &lt;2 years</li> <li>≥2 to &lt;9 years</li> <li>≥9 to &lt;18 years</li> <li>Predictive PK/PD model compared with PK/PD data from patients enrolled in Part A in &gt;2 years of age</li> <li>&lt;2 year age cohort not yet enrolled; Part A to stay open for these patients</li> </ul> </li> </ul>	Data from Part A supports advanceme nt to pivotal Part B with simple, fixed dose for >2 years age cohorts	<ul> <li>Pivotal registrational study to support NDA for potential regulatory approval</li> <li>Safety and efficacy</li> <li>Two age cohorts         <ul> <li>≥2 to &lt;9 years</li> <li>≥9 to &lt;18 years</li> </ul> </li> <li>Study planning, design underway</li> <li>Start of enrollment targeted for end of 2023</li> </ul>	Safety and efficacy data from Part B support a potential regulatory filing	<ul> <li>Potential pediatric HSCT- TMA regulatory filing with FDA supported by data from pivotal pediatric Phase 3 Part B and supportive Phase 2 clinical trial in adult</li> </ul>
		Part B Endpoint: and imn	Part B Endpoint:         TMA response including independence of RBC transfusion and/or urine protein creatinine ratio ≤ 2 mg/mg maintained ≥ 28 days immediately prior to any scheduled clinical visit up to Week 16		
Phase 2 Clinical Trial in	Supports advancement into a	adult HSCT-TMA PI	nase 3 study		

- Adult Phase 2 and 3 clinical trials support potential adult HSCT-TMA NDA
  Adult Phase 2 and pediatric Phase 3 support potential pediatric HSCT-TMA NDA
- 14 Adult HSCT-TMA

# Pediatric & Adult HSCT-TMA U.S. Market Opportunity





# PAS-Nomacopan May Provide 3 Key Benefits: Complement Inhibition, Fewer Doses and LTB4 Inhibition to Address CNV Risk



- Long-acting PAS-nomacopan is being developed with a profile that has the potential to deliver efficacy benefits of complement inhibition with a fraction of the number of annual doses (compared with current late-stage complement-only inhibitors for GA)
- Simultaneously, it may help address CNV safety risks . reducing the total number of intravitreal injections (IVIs) needed to help preserve vision from GA as well as CNV

New PAS-nomacopan construct composition of matter patent filed Dec. 2022; if granted provides patent protection to 2042



- References

   Liao DS, et al., Complement C3 inhibitor pegcetacoplan for geographic atrophy secondary to age-related macular degeneration a randomised phase 2 trial. Opthalmology 2019; 127: 586-195.
   Jaffe GJ, et al., C5 inhibitor avacincaptad hege for geographic atrophy due to age-related macular degeneration a randomised pixotal phase 2/3 trial. Opthalmology 2021; 128: 576-586.
   McClard CK, et al. Questionnaire to Assess Life impact of Treatment by Intravitreal injections. (QUALITII): Development of a patient-reported measure to assess treatment burden of repeat intravitreal injections. BMJ Open Opthalmol. 2021;6(1):e000669.
   Sasaki F, et al., Luckotiene B4 promotes neovascularisation and macrophage recruitment in muri wet-type AMD models. JCl Insight 2018; 3: e96902.

#### 1. Efficacy .....

Efficacy of complement C5 inhibition slowing progression of GA lesions is well understood<sup>1,2</sup>

## 2. Frequency of Intravitreal Injections

Less frequent needle injections into the back of the eye, a source of fear, discomfort and disruption for patients<sup>3</sup>; potential for only 3 to 4 injections with PASnomacopan each year

#### 3. Safety .....

LTB4 inhibition may prevent VEGF-A overexpression, a key driver of sight-threatening CNV,<sup>4</sup> a safety risk (treated with VEGF inhibitors) associated with current late-stage complement-only inhibitors<sup>1,2</sup>

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# **PAS-Nomacopan in GA Progress Update**



PAS-nomacopan development on track for IND submission 1H24

Based on progress, Akari is targeting an Investigational New Drug (IND) application submission to the U.S. Food and Drug Administration in the first half of 2024 2 New PAS-nomacopan versions fully active; target dosing interval extended beyond 3 months

Pre-clinical development on long-acting PAS-nomacopan has successfully achieved multiple new and promising versions that are fully active, show high expression levels and have significantly larger hydrodynamic radii than earlier versions, which potentially increase the PASnomacopan target dosing interval beyond 3 months

Development has progressed from lab scale to pre-GMP optimization and is on track to select the version of PASnomacopan that will advance to GMP manufacturing and non-clinical safety studies in preparation for an IND and the start of clinical trials in GA

New versions expressing

well and on track toward

GMP scale for clinical trials

# PAS-Nomacopan Has Potential to Address the Significant Patient Burden of Frequent Intravitreal Injections for GA/CNV





- Between monthly or every other month (EOM) treatment for GA and CNV, patients could face 18 injections a year<sup>1,2</sup>
- Discontinuation for a latestage complement-only GA treatment reported up to 20%<sup>1</sup>
- For anti-VEGF CNV . treatments, up to 1/3 of patients may discontinue/ not adhere3

Long-Acting PAS-Nomacopan Has Potential to Extend Intravitreal Dose Interval to 3 to 6 Months<sup>4</sup> 10,00 ntration of PAS-noma in µg/mL of vitreous 1,000 100 10 Concel PAS-600 at 1 µg/mL 1 Calculated lin PAS-600 at 4 0.1 25 50 75 125 150 175 Davs

roval Pending eylea\_fpi.pdf travitreal Inje ults for Treating Geographic Atrophy https://www.medscape.com/viewarticle/981813#vp\_2

n ections (QUALITII). *BMJ Open Ophthalmol.* 2021;6(1):e000669. t of GA and other retinal diseases. Poster presentation ARVO, 2022.



# PAS-Nomacopan Decreased VEGF Levels As Effectively As An On-Market Anti-VEGF In a Pre-Clinical CNV Model



- PAS-nomacopan is a bispecific inhibitor of LTB4 and • complement (C5)
  - 0 Complement inhibition has shown efficacy in slowing progression of GA1-3
  - o LTB4 inhibition may also reduce the risk of sight-threatening choroidal neovascularization (CNV), a safety risk associated with clinical trials of current late-stage complement-only inhibitors1-3
- In a standard pre-clinical model of laser-induced CNV, long-acting PAS-nomacopan (single IVI) decreased VEGF levels as effectively as anti-VEGF treatment Eylea® (multiple IVIs)1,2
- Positive results from the pre-clinical studies<sup>3,4</sup> . support the advancement of long-acting PASnomacopan toward IND/IMPD for intravitreous injection (IVI) and clinical trials in GA as well as the potential for the investigational treatment to address areas of unmet patient needs, including risk of CNV



- References

   Liao DS, et al., Complement C3 inhibitor pegcetacopian for geographic atrophy secondary to age-related macular degeneration a randomised phase 2 trial. Opthalmology 2019; 127: 586-195.
   Jafle GJ, et al., C5 inhibitor avacincaptad peg for geographic atrophy due to age-related macular degeneration a randomised pivotal phase 2/3 trial. Opthalmology 2021; 128: 576-586.
   Eskandaryour M, et al. Leckrötrien B, and Its Receptor in Experimental Autoimmune Uveitis and in Human Retinal Tissues: Clinical Sevenity and LTB, Dependence of Retinal Th17 Cells. Am J Pathol. 2021;191(2):320-334.
   Eskandaryour M, et al. Leckrotrien B, and Retinal Vascultis in Posterior Uveitis and Experimental Models: The Leukotriene (LT)B4-VEGF Axis. Cells 2021;10(2):396. Published 2021 Feb 15.





- Ticker: AKTX (NASDAQ)
- 74.4M ADS outstanding
- Cash of \$16M as of September 30, 2022
- Estimated cash runway into Q3 2023

