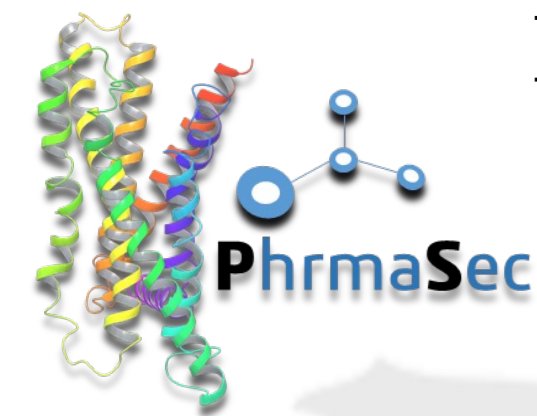


# Finding Innovative Solution for Health Related Problems



## Hypertension mortality

TOTAL DEATHS

13.5%

of worldwide

WORLDWIDE

1.1

Billion in 2019

WILL REACH

1.56

Billion in 2025

10% people suffering from resistant hypertension

CHINA

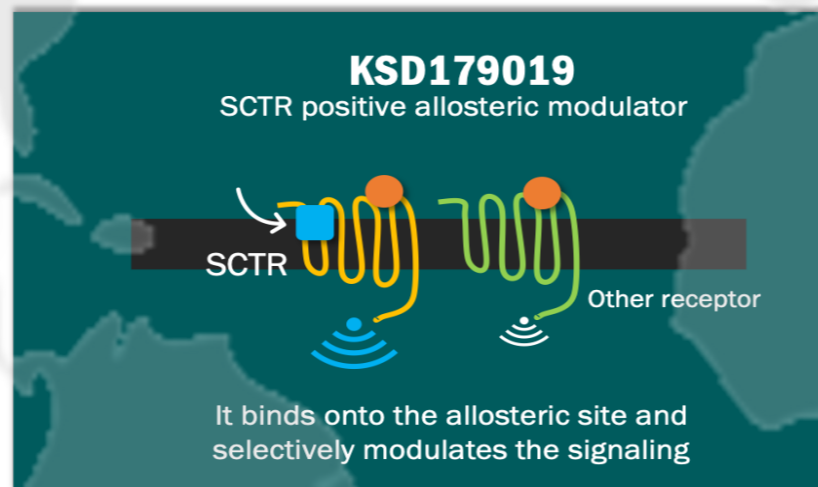
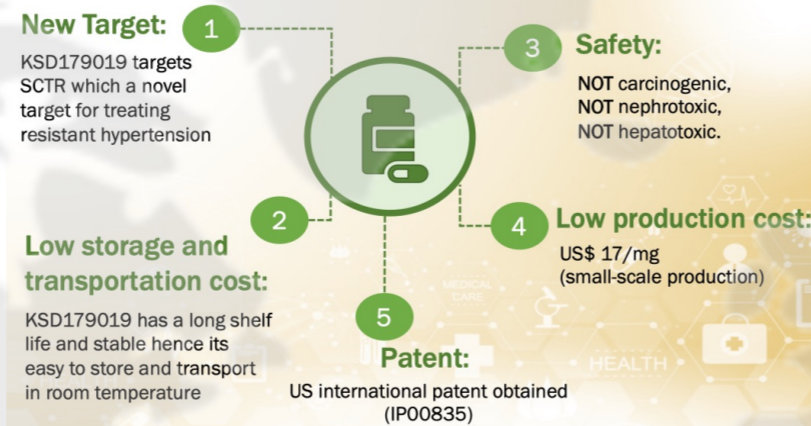
358

Million in 2019

HONG KONG

2.05

Million in 2019



## Allergies

6<sup>th</sup> leading cause of chronic illness

High burden in pediatric populations Hong Kong & China

## Chronic urticaria

78 million

At any given time worldwide

## Atopic dermatitis

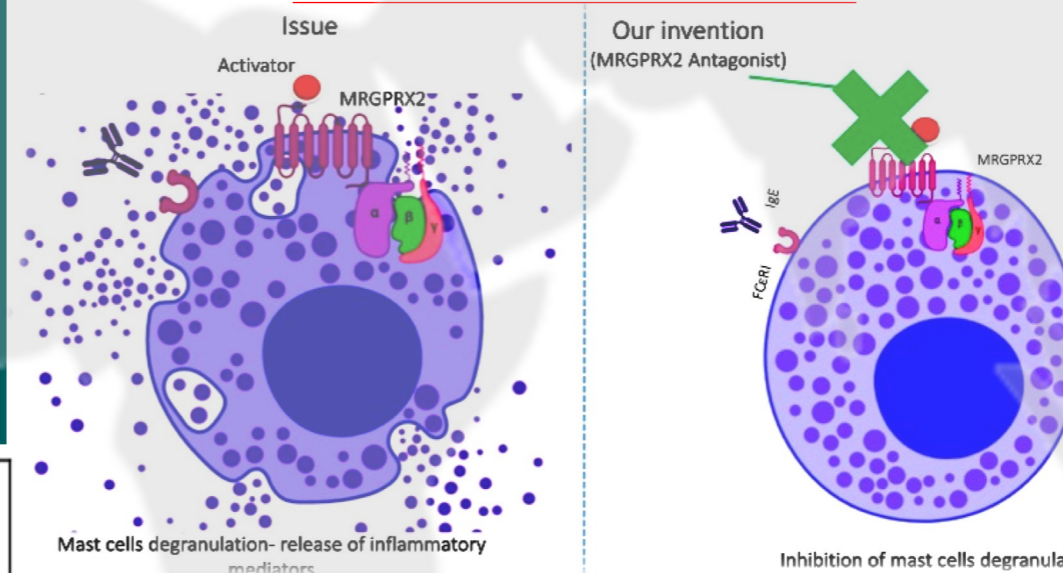
195 million

Cases in 2017 worldwide

## Rosacea

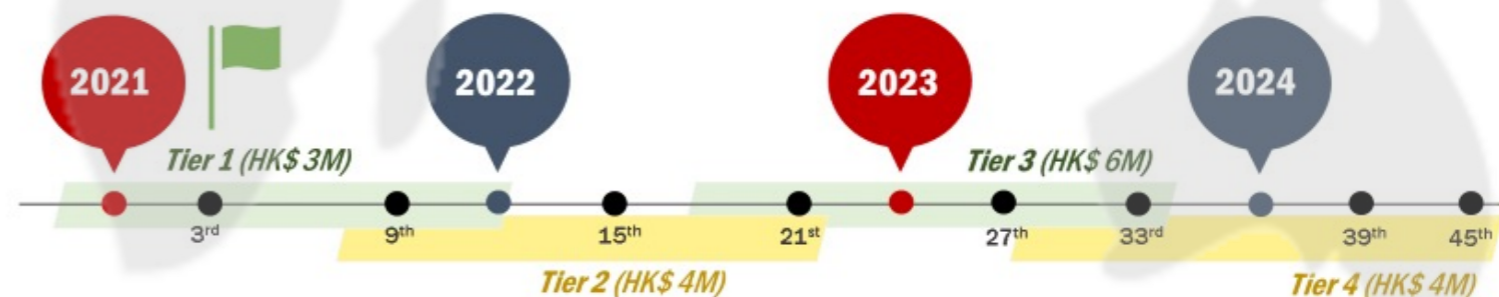
415 million

Cases in 2018 worldwide



PROBLEM

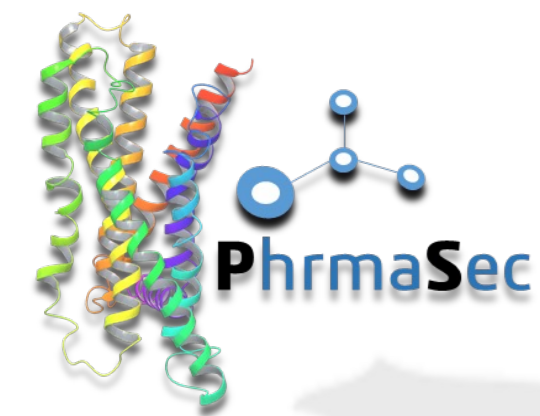
**Small molecule MRGPRX2 antagonist**



- ✓ Identified lead molecule as MRGPRX2 antagonist
  - ✓ Designed potent novel small molecule MRGPRX2 antagonist
  - ✓ Synthesized and evaluated the pharmacological activity of novel small molecule MRGPRX2 antagonist
- Applied US patent with HKU TTO
  - Applied patent in Mainland China
  - Performing pharmacodynamics experiments
  - Safety pharmacology and Pharmacokinetic studies in rodents
  - Non-rodent PD, PK and toxicology study in GLP lab
  - Reproducing toxicity studies in GLP lab
  - Collaboration and License agreement with big-pharma company

<b>Patent</b>	US provisional patent (O/Ref: IP00835)	EXCLUSIVE LICENSE	VERSITECH LTD.
<b>Funding Support</b>	TSSSU@HKU iDENDRON	Angel Investments	HKU Faculty of Science RAE Improvement Fund
<b>Competition</b>	TOP 10 FINALISTS	Permanent Display at "Innovation Center" FuShan, China	Third Prize in 6 <sup>th</sup> Hong Kong University Student Innovation and Entrepreneurship Competition





# 为健康寻找创新解决方案

## 高血压

死于**高血压**占  
全球总死亡  
**13.5%**

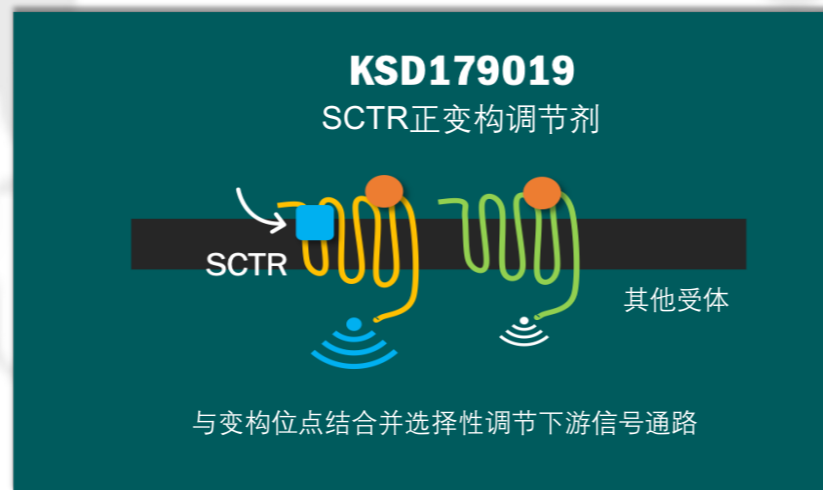
全世界  
**11**  
亿 (2019)

预计达到  
**15.6**  
亿 (2025)

其中10%的人受到顽固性高血压的折磨

中国大陆  
**3.58**  
亿 (2019)

中国香港  
**205**  
万 (2019)



## 过敏

慢性病的第六大原因  
中国儿科人群的高负担

慢性荨麻疹  
**7.8 亿**  
全世界

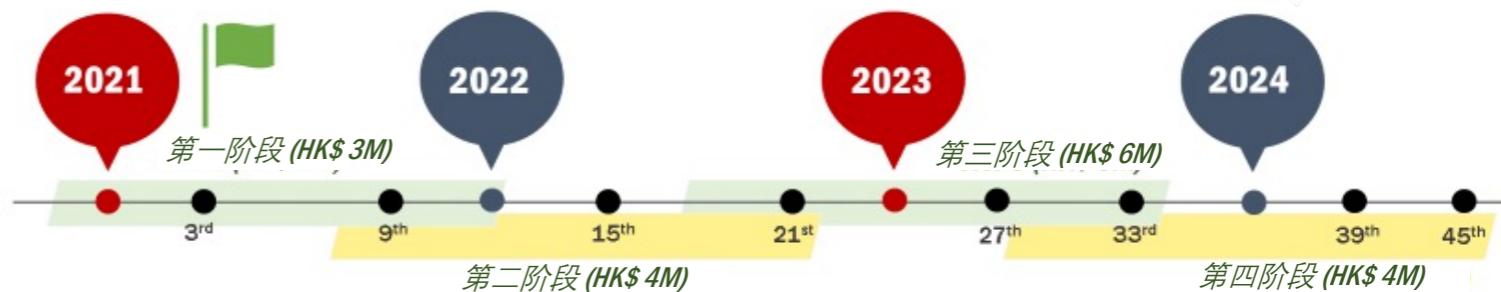
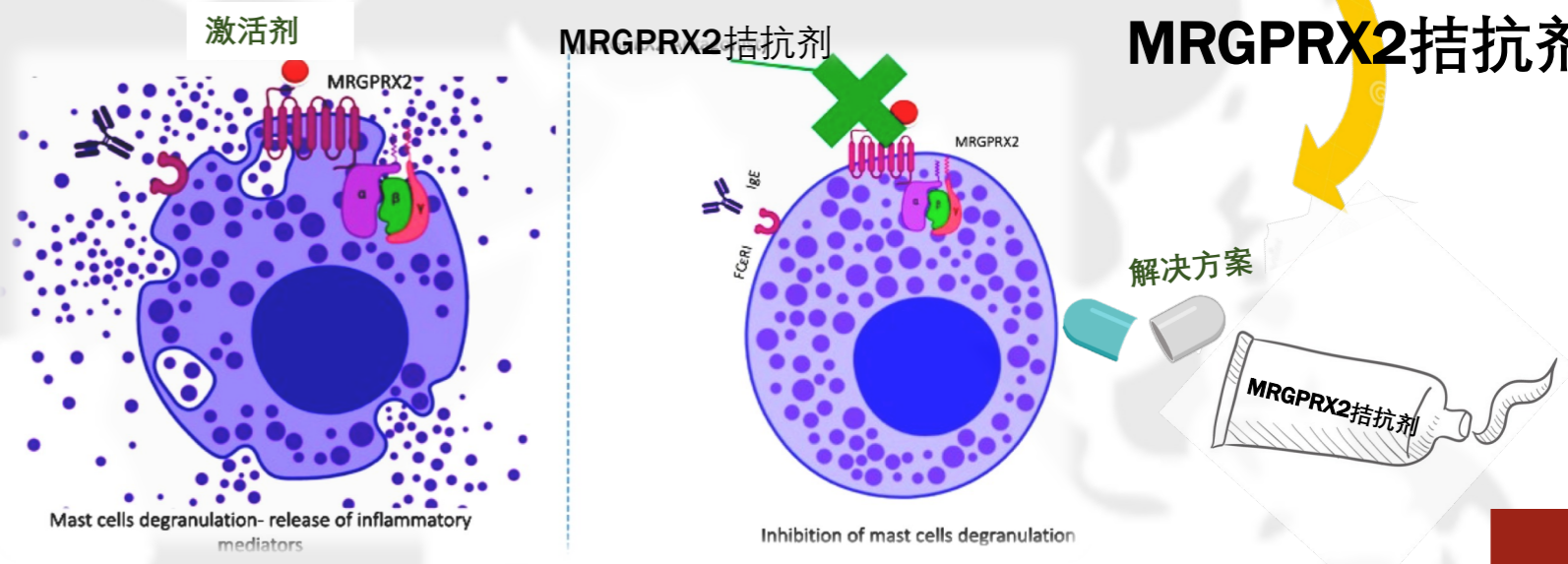
特应性皮炎  
**1.95 亿**  
全世界 (2017)

红斑痤疮  
**4.15 亿**  
全世界 (2018)



严峻挑战

小分子  
**MRGPRX2 拮抗剂**



- ✓ 鉴定为 MRGPRX2 拮抗剂的先导分子
- ✓ 设计了有效的新型小分子 MRGPRX2 拮抗剂
- ✓ 合成并表征了新型小分子 MRGPRX2 拮抗剂的抗过敏和抗炎活性
- 药代动力学试验
- 安全药理学和啮齿类动物药理研究
- GLP 实验室的非啮齿动物 PD、PK 和毒理学研究
- GLP 实验室的可重复性毒理学研究
- 与大型制药公司的合作和许可协议

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