深圳国顺康医药科技有限公司
GH Therapeutics Co., Ltd.

公司发展及主要在研项目介绍
Introduction of Company and Products

徐文联 博士/Wenlian Xu Ph. D.

2022年09月/2022/09/22

关于深圳国顺康医药 /GH Therapeutics Co., Ltd.

国顺康医药

深圳国顺康医药科技有限公司

(GH Therapeutics Co., Ltd.)

成立时间/Founded：**2022年7月4日**/July 4, 2022

公司总部/Headquarters：**深圳市坪山区生物医药研发转化中心**/Shenzhen Pingshan District Biomedical R&D and Transformation Center

经营范围/Business scope：**健康医疗领域技术和产品的开发与应用**/Development and application of technology and products in the field of health care

产品定位/Product positioning：**抗肿瘤及协同治疗领域的新药研发/**New drug research and development in the field of anti-tumor and synergistic therapy

经营模式/Business model：**采取公司内部研发和委托外包服务CRO公司相结合的运营模式，同时积极开展与国内外知名企业和研发机构合作，进行产品转让及引进**/Adopts the operation mode of combining internal R&D and entrusted outsourcing services CRO companies, and actively cooperates with well-known enterprises and R&D institutions at home and abroad to license-in & out products

注册资本/Registered capital：**600万人民币**/6 million RMB

公司英文名称/Company English Name：GoHarmony Therapeutics Co., Ltd.

创始人团队
Founder team

联合创始人，首席执行官兼首席科学官，徐文联博士
Dr. Wenlian Xu, Co-founder, CEO and Chief Scientific Officer

20多年生物医药领域基础研究，产品研发和企业管理经验。曾任清华大学副教授，美国约翰霍普金斯大学研究员，美国昭衍新药研发中心副总裁，思路迪（北京）医药科技有限公司副总经理等。在思路迪医药工作期间，作为项目负责人，领导团队完成全球首个皮下注射，抗PD-L1单域抗体的从临床注册申请到临床三期的上市开发/ More than 20 years experience in basic research, product development and enterprise management in the field of biomedicine. He has ever been an associate professor at Tsinghua University, a research Scientist at Johns Hopkins University, a vice president of Joinn Laboratory USA Co., Ltd. and the deputy general manager of 3D Medicines (Beijing) Co., Ltd. During his work at 3D Medicines, as the project leader, he led the team to complete the world's first subcutaneous injection, anti-PD-L1 single-domain antibody from clinical registration application to clinical phase III marketing development.

联合创始人，药物化学部总监，吴伟博士
Dr. Wei Wu, Co-founder and Director of the Medicinal Chemistry Department

中科院化学所博士，11年新药研发和项目管理经验，曾做为项目负责人，领导了10多个新药项目的研究与开发，其中4个新药项目进入临床研究阶段/ Ph.D., Institute of Chemistry, Chinese Academy of Sciences, 11 years of experience in new drug R&D and project management, as a project leader, led the research and development of more than 10 new drug projects, of which 4 new drug projects entered the clinical research stage.

徐文联博士工作简历/ Work experiences of Dr. Wenlian Xu

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- **2022--　　：China, 深圳国顺康医药科技有限公司/GH Therapeutics Co., Ltd.;**
  Co-founder, CEO and Chief Scientific Officer;
- 2020-2022：China, 北京国鸿生物医药科技有限公司/BEIJING GUOHONG Biomedicines Co., Ltd.;
  Co-founder, CEO and Chief Scientific Officer;
- 2016-2020：China, 3D Medicines (Beijing) Co. Ltd.,
  Deputy General Manager, Project Leader;
- 2014-2015：USA, X-Willey International LLC, CEO;
  China, Shanghai Meb-Venture, Vice President;
- 2011-2013：USA, Joinn Laboratory, Vice President;
- 2009-2010：USA, BioAgri Corporation, Principal Scientist;
- 1998-2009：USA, Johns Hopkins University, Research Scientist;
- 1997-1998：USA, Ohio University, Visiting Scholar;
- 1993-1999：China, Tsinghua Uni., Assis. & Assoc. Professor.

清華大學 Tsinghua University　OHIO UNIVERSITY　昭衍 JOINN　3DMed 思路迪　国鸿医药 GH THERAPEUTICS

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GH-035：替代型抗真菌抑制剂

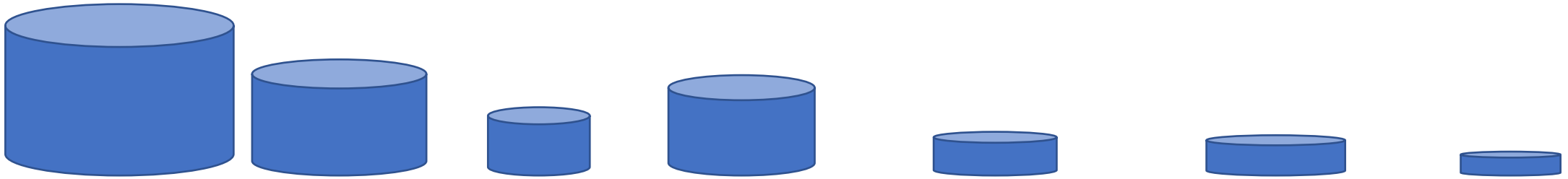
GH-035： Alternative antifungal inhibitors

立项背景/Project background

1. **感染性疾病会给人类造成巨大痛苦和伤害/**Infectious diseases could cause great suffering and harm to humans;
2. **历史上曾发生多起危害巨大的感染性传染病/**There have been many infectious diseases pandemic with great harm in history;
3. **对感染性疾病的预防和治疗不得不引起社会的高度重视/**The prevention and treatment of infectious diseases must attract great attention from society!

感染性疾病病原物及疾病种类

Infectious disease pathogens and disease types



病毒、细菌、真菌、原虫、支原体、衣原体、其他

Viruses, bacteria, fungi, protozoa, mycoplasma, chlamydia, other

GH-035：替代型抗真菌抑制剂/GH-035： Alternative antifungal inhibitors

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当地时间 2022 年 10 月 25 日，世界卫生组织发布警告称，由于新冠肺炎疫情、真菌耐药性增加和免疫功能低下患者增多，人们被真菌感染的风险正在飙升。负责领导这一研究的专家、悉尼大学传染病研究所的贾斯汀·比尔兹利博士在声明中表示:“**真菌是‘被人们所遗忘的’传染病，它们可以导致毁灭性的后果，但长期以来却一直被人们所忽视，以至于我们几乎不了解这一问题的严重性。**”

On October 25, 2022, local time, the World Health Organization issued a warning that people's risk of fungal infection is soaring due to the new crown pneumonia epidemic, increased fungal drug resistance and the increase in immunocompromised patients. Dr Justin Beardsley, the professor at the Institute of Infectious Diseases at the University of Sydney, who led the study, said in a statement that **"fungi are 'forgotten' infectious diseases. They can lead to devastating consequences, but they have been so neglected for so long that we hardly understand the magnitude of the problem.”**

GH-035：替代型抗真菌抑制剂/GH-035： Alternative antifungal inhibitors

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容易受真菌感染药物的高危人群/People at high risk of being susceptible to fungal infections

高危因素 High-risk factors	念珠菌感染 Candida infection	曲霉感染 Aspergillus infection
高危人群 People at high risk	**严重粒细胞缺乏/Severe agranulocytosis**	
	免疫功能低下/Immunocompromised	
	人体器官移植/Human organ transplantation	
	入住ICU/ICU patient	
	免疫抑制剂治疗/Immunosuppressant therapy	
	糖尿病/Diabetes	骨髓抑制
	肾功能衰竭/Renal failure	长期使用激素治疗/Long-term hormone therapy
	血液透析/Hemodialysis	慢性阻塞性肺病（COPD）/Chronic obstructive pulmonary disease (COPD)
	使用广谱抗生素/Use broad-spectrum antibiotics	HIV感染/HIV infection
	中心静脉插管/Central venous catheterization	重度烧伤/Severe burns
	肿瘤和化疗/Oncology and chemotherapy	营养不良/Malnutrition
	外科手术/Surgery	血液、固体肿瘤/Blood, solid tumors
	住院时间延长/Prolonged hospital stay	
	急性重症胰腺炎/Acute severe pancreatitis	

抗真菌感染的上市药物和销售/Marketing and sale of anti-fungal inhibitors

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分类 Category				代表性药物 Representative drugs	原研 Maker	2019年全球销售额(亿美元) Global sales in 2019 (US$ 0.1 billion)	优劣势分析 Strengths and weaknesses analysis
抗真菌抑制剂 Antifungal inhibitors	多烯类 Polyenes			两性霉素B及衍生物 Amphotericin B and derivatives			肾脏不良反应显著 Renal adverse effects are significant
化学合成抗真菌药物 chemosynthesis Antifungal drugs	唑类 Azoles	咪唑 imidazole	第一代/G1	咪康唑/Miconazole	/	/	肾功能不全患者中需调整剂量 Patients with renal insufficiency require dose adjustment
			第二代/G2	酮康唑/Ketoconazole	/	/	
		三唑 Triazole	第三代/G3	氟康唑/Fluconazole	辉瑞/Pfizer	1.9	
				伊曲康唑/Itraconazole	杨森/J&J	/	老年人、肾功能不全患者中谨慎使用 Use with caution in the elderly, patients with renal insufficiency
			新一代/Gn Next Generation	伏立康唑/Voriconazole	辉瑞/Pfizer	3.8	注射剂在中重度肾功能不全患者中不能使用 Injections can not be used in patients with renal insufficiency
				泊沙康唑/Posaconazole	MSD	6.6	肾功能不全患者中无需调整剂量 Patients with renal insufficiency do not need to adjust the dose
				艾莎康唑/Aisaconazole	Basilea , 辉瑞/Basilea, Pfizer	/	治疗相关的不良反应艾沙康唑明显少于伏立康唑(42.4%vs59.8%) Adverse effects of isavuconazole were less than voriconazole
	嘧啶 pyrimidine	胞嘧啶 cytosine		氟胞嘧啶/Flucytosine	/	/	原发耐药或继发耐药较普遍 Primary or secondary resistance is common
	丙烯胺类/Acrylamines			特比奈芬/Tebinafine	诺华/Novartis	/	浅表真菌引起的皮肤、指甲感染 Skin and nail infections caused by superficial fungi
	棘白菌素类 Echinococcins			卡波芬净/Carbofengin	默沙东/Merck	2.5	抗真菌谱较三唑类和多烯类药物窄，具有疗效好且安全性显著的优势，但是非口服剂型是其一大劣势 The antifungal spectrum is narrower than triazoles and polyenes, which has the advantage of good efficacy and significant safety, but non-oral dosage forms are a major disadvantage
				米卡芬净/Micafungin	安斯泰来/Astellas	3.2	
				阿尼芬净/Anifungin	Vicuron, 辉瑞/Vicuron, Pfizer	1.71 (2017)	

注：2019年全球销售额数据来自药渡数据库/Note: 2019 global sales data from Yaodu database

各抗真菌感染的上市药物的抗菌谱/Antimicrobial spectrum of each marketed fungal inhibitor

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菌属分类/Taxonomy		抗真菌菌谱/Antifungal spectrum							
		多烯类 Polyenes	棘白菌素类/Echinococcins			三唑类/Triazoles			
			卡波芬净 Carbofengin	米卡芬净 Micafungin	阿尼芬净 Anifungin	氟康唑 Fluconazole	伊曲康唑 Itraconazole	伏立康唑 Voriconazole	**泊沙康唑** Posaconazole
念珠菌属 Genus Candida	白色念珠/White rosary	+	+	+	+	+	+	+	+
	光滑念珠/Smooth rosary	+	+	+	+	±	±	±	±
	热带念珠/Tropical rosary	+	+	+	+	+	+	+	+
	近平滑念珠/Near smooth rosary	+	±	±	±	+	+	+	+
	克柔念珠/Keru rosary	+	+	+	+	/	±	+	+
	葡萄牙念珠/Portuguese rosary	/	+	+	+	+	+	+	+
	季也蒙念珠/Jiye rosaries	/	±	±	±	±	±	+	+
曲霉菌属 Aspergillus spp	烟曲霉菌/Aspergillus fumigatus	+	+	+	+	/	+	+	+
	黄曲霉菌/Aspergillus flavus	+	+	+	+	/	+	+	+
	土曲霉菌/Aspergillus tutus	/	+	+	+	/	+	+	+
	黑曲霉菌/Aspergillus niger	+	+	+	+	/	±	+	+
	构巢曲霉菌/Aspergillus nesting	/	+	+	+	/	+	+	+
新型隐球菌/Cryptococcus neoformans		+	/	/	/	/	+	+	+
镰刀菌属/Fusarium spp		±	/	/	/	/	/	±	±
丝孢菌属/Genus Hylomycetes		/	/	/	/	/	/	±	±
多育赛多孢子菌/Doyospora dospora		±	/	/	/	/	±	+	+
毛霉菌/Mucormyces		+	/	/	/	/	/	/	+
芽生菌属/Blastomycetes		+	±	±	±	+	+	+	+
组织胞浆菌属/Histoplasma spp		+	±	±	±	+	+	+	+
球孢菌属/Genus Coccidioides		+	±	±	±	+	+	+	+

备注：“+”代表体外具有抗菌活性，“±”代表体外抗菌活性较小或不稳定，“/”代表体外无抗菌活性/Remarks: "+" indicates antibacterial activity in vitro, "±" represents little or unstable antibacterial activity in vitro, and "/" represents no antibacterial activity in vitro.

泊沙康唑在中国的销售/Posaconazole sales in China

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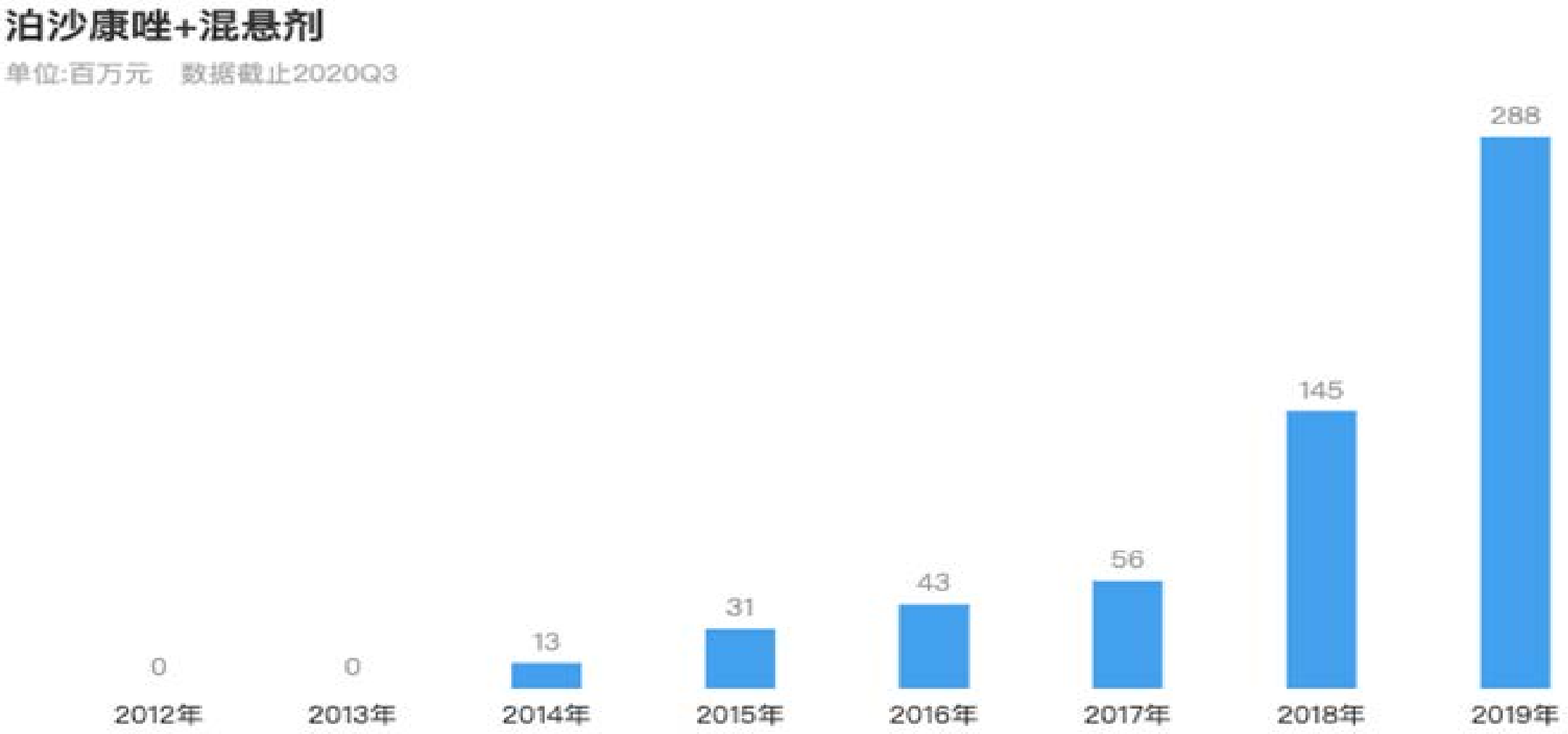

泊沙康唑的缺陷/Defects of posaconazole

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1. 水溶性极差/Very poor water solubility;
2. 口服生物利用度低/Low oral bioavailability;
3. 病人口服吸收个体药效差异性较大/The individual efficacy of oral absorption by patients varies greatly;
4. 注射剂需要中心静脉置管，风险较大等/Injections require central venous catheterization, which is very risky, etc.

泊沙康唑注射剂的缺陷—中心静脉置管注射

Defects of posaconazole injection – central venous catheterization

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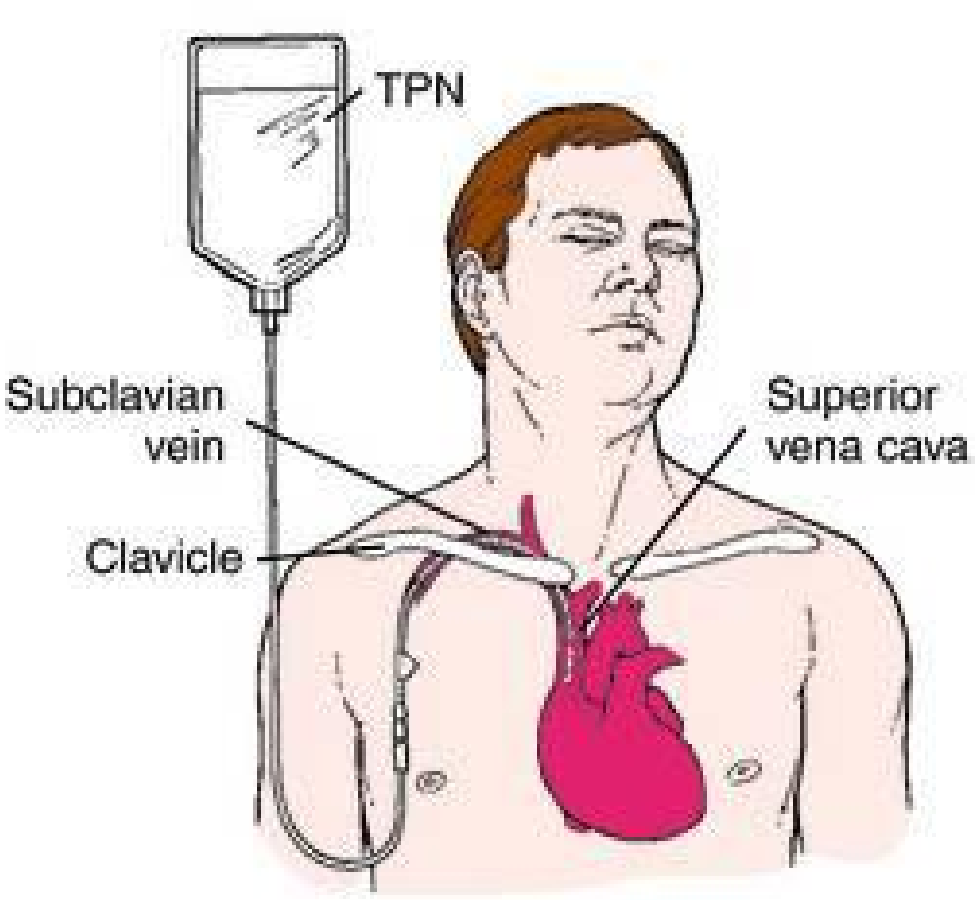

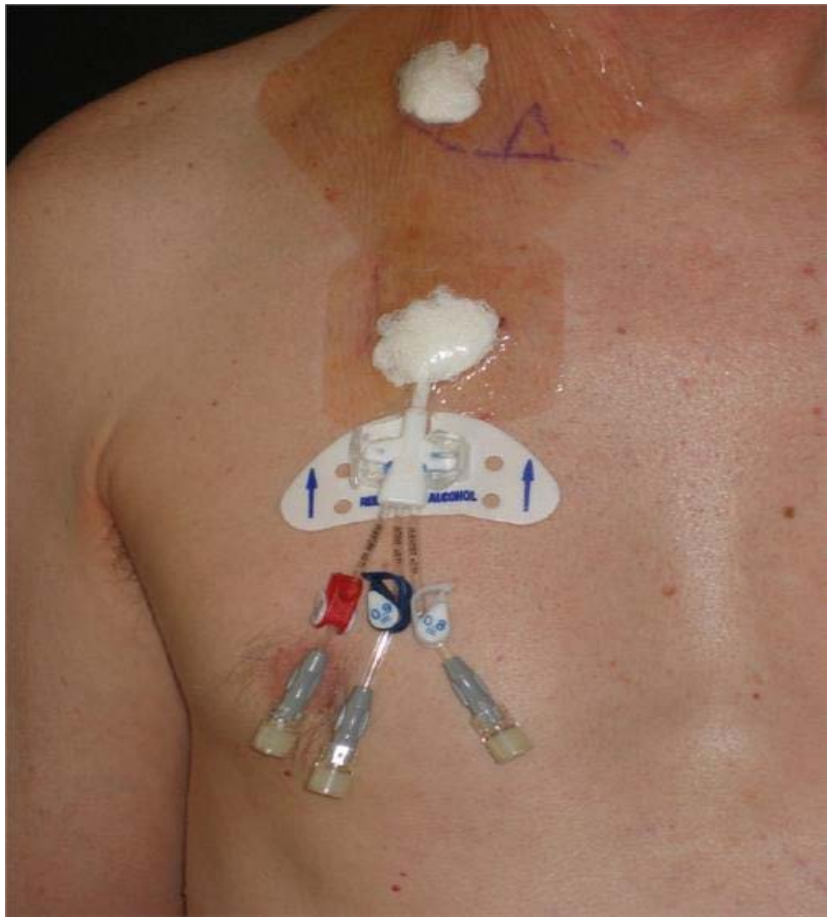

GH-035：替代型抗真菌抑制剂/GH-035： Alternative antifungal inhibitors

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- 本项目的核心关键点是**替代**：**1）改变泊沙康唑分子特性，提高水溶解性，使其注射剂能够通过常规的静脉注射使用（替代-1），解决临床应用不便和高风险的重大问题；2）通过改变分子特性从而改变口服制剂的特性，使口服制剂能够在所有受感染群体中有较好的吸收（替代-2）/The key points of this project are to replace: 1) through changing the molecular properties of posaconazole, improve water solubility, and make its injection available through conventional intravenous injection (substitution-1), solving the major problems of clinical inconvenience and high risk; 2) By changing the molecular properties and thus changing the characteristics of oral formulations and make it be better absorbed (alternative-2) in all infected patient groups.**
- 研究过程中重点关注的问题是：**1）候选化合物的溶解性和稳定性；2)候选化合物在体内的有效性，即候选化合物在体内分解成泊沙康唑原药的特性；3）修饰后化合物的可能毒性/The main issues to be focused on during the study are: 1) solubility and stability of candidate compounds; 2) the effectiveness of the candidate compound in vivo, that is, the decomposition of the candidate compound into the original drug of posaconazole in vivo; 3) The safety of the modified compound.**

替代型泊沙康唑注射剂—常规静脉注射

Alternative posaconazole injection—to be injected conventional intravenously

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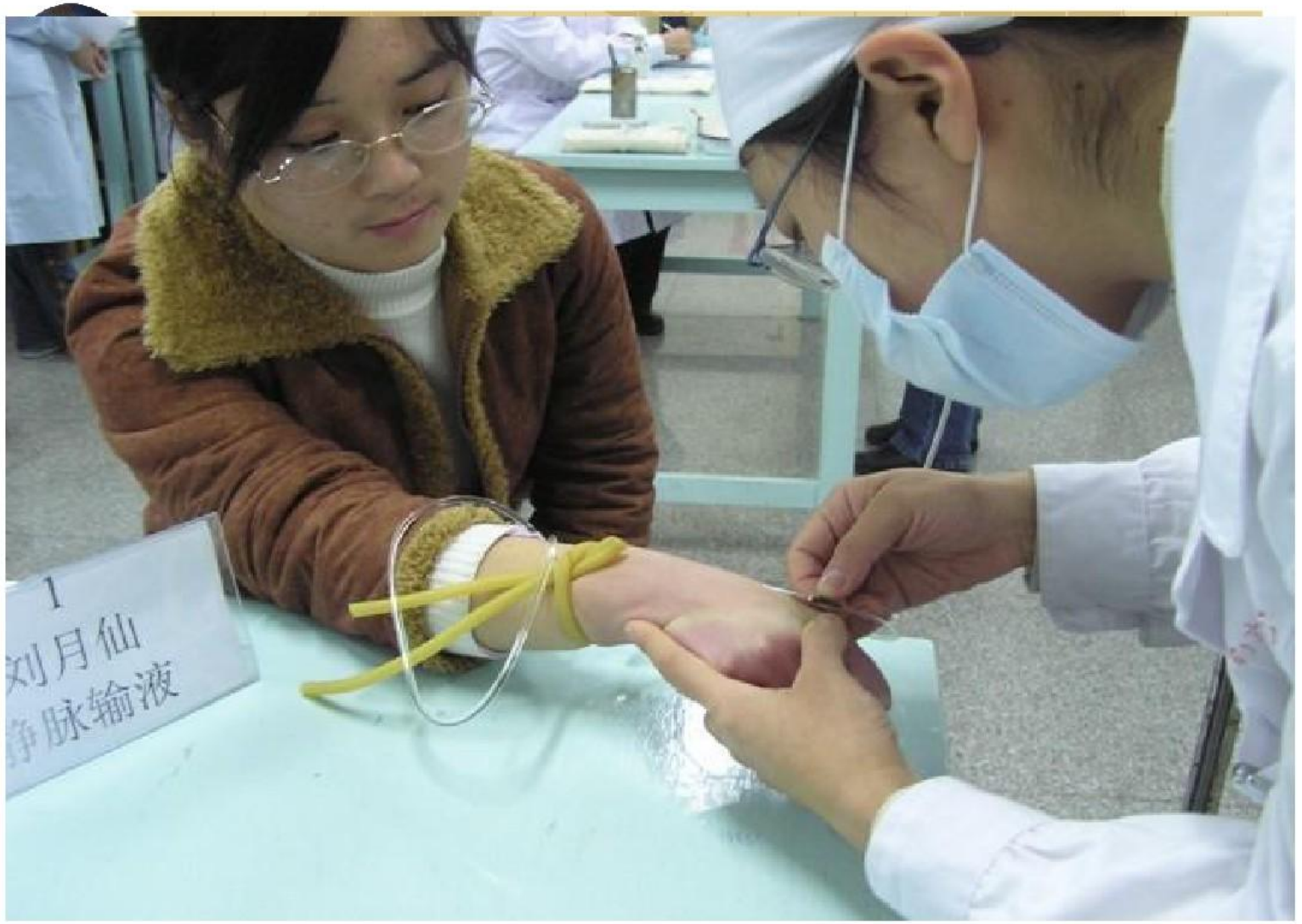

替代型泊沙康唑注射剂—从中心静脉置管注射到常规静脉注射

Alternative posaconazole injection—from central venous catheterization to conventionnal intravenously

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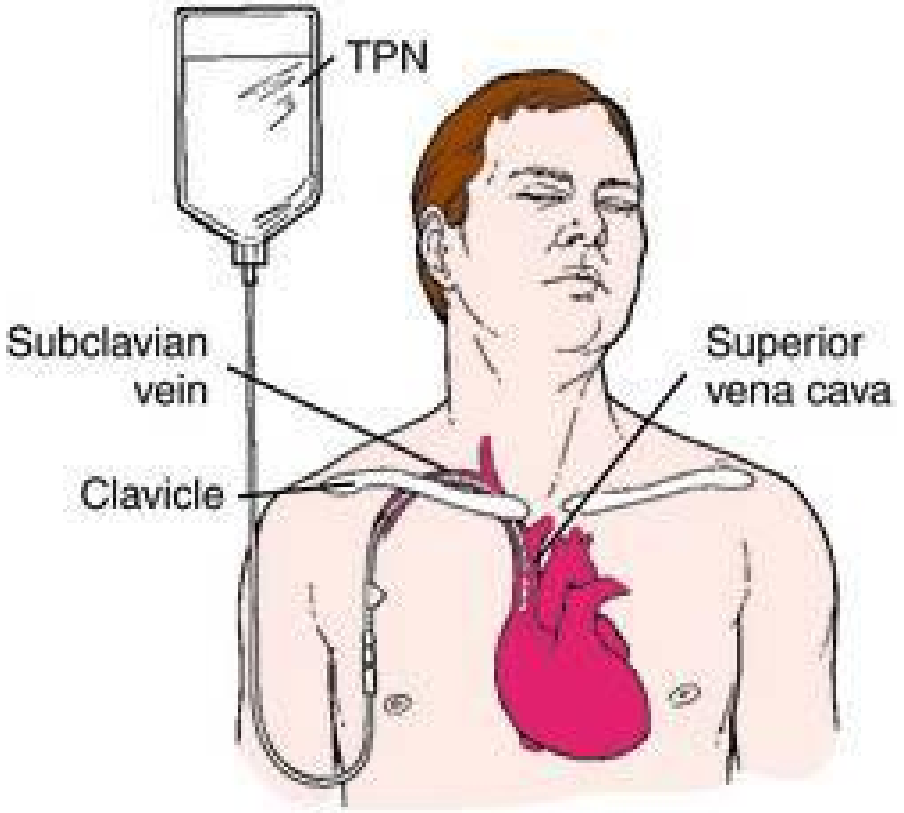
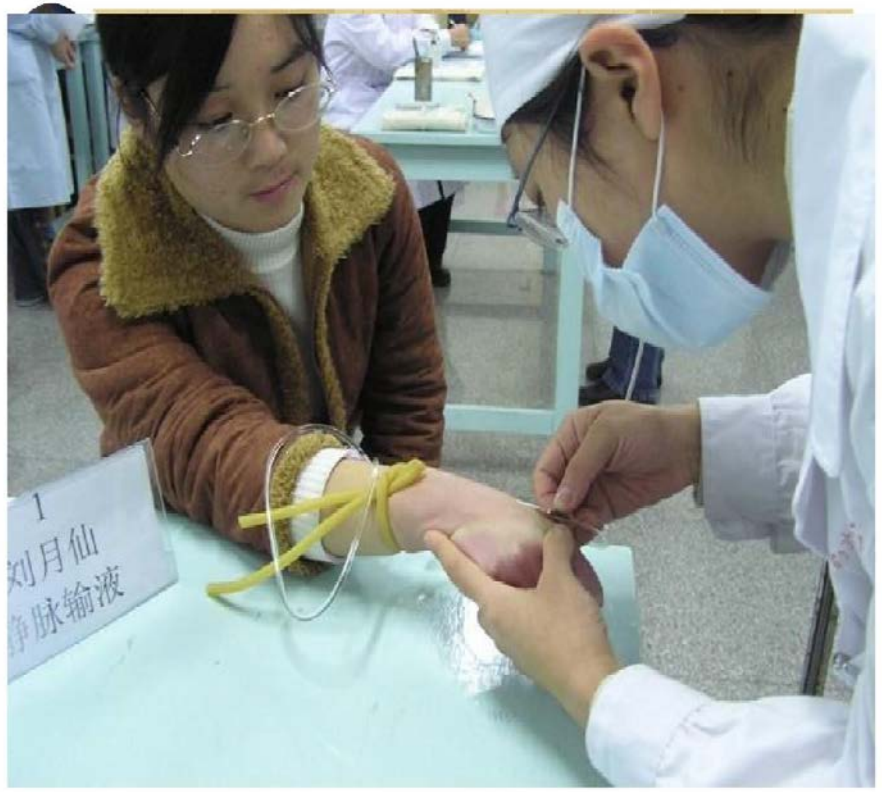


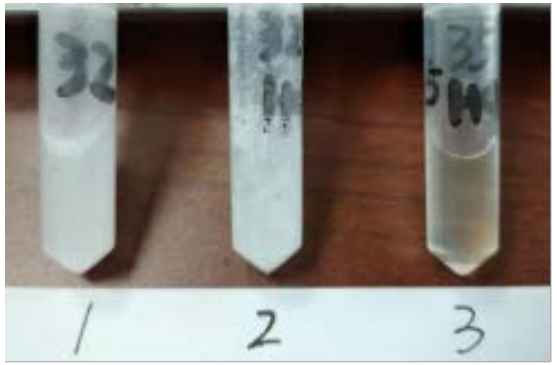


目前已获得的研究数据
Research data obtained so far

候选化合物GH-035的筛选： 水溶解性和稳定性测定

Screening of candidate compound GH-035: water solubility and stability assay

1. GH-035溶解度（目测）
   GH-035 solubility (Visual)：



初步溶解度看，相同摩尔浓度下GH-035-HCl(编号3)基本完全溶解，而泊沙康唑不溶都沉淀在底部（编号1），即使将泊沙康唑制成盐酸盐也是不溶解，有大量絮状沉淀，且有黏壁(编号2)/ From the preliminary solubility test, GH-035-HCl (No. 3) is basically completely dissolved at the same molar concentration, while posaconazole is insoluble and precipitated at the bottom (No. 1), even if posaconazole is made into hydrochloride, it is insoluble, there is a large amount of flocculent precipitate, and there is a sticky wall (No. 2)/。

2. **GH-035稳定性/GH-035 stability：**

紫外波长 (UV)	化合物 compound	Day 0	GH-035 (40℃、75% humidity 30 days)			
			sealed	open	0.9% NaCl	Glucose solution
210nm	GH-035	100%	96.6	98.9	99.9	98.7
	Posaconazole	0	3.0	0.9	0.6	0.2
254nm	GH-035	100%	96.3	98.8	98.8	97.7
	Posaconazole	0	3.7	1.2	0.8	0

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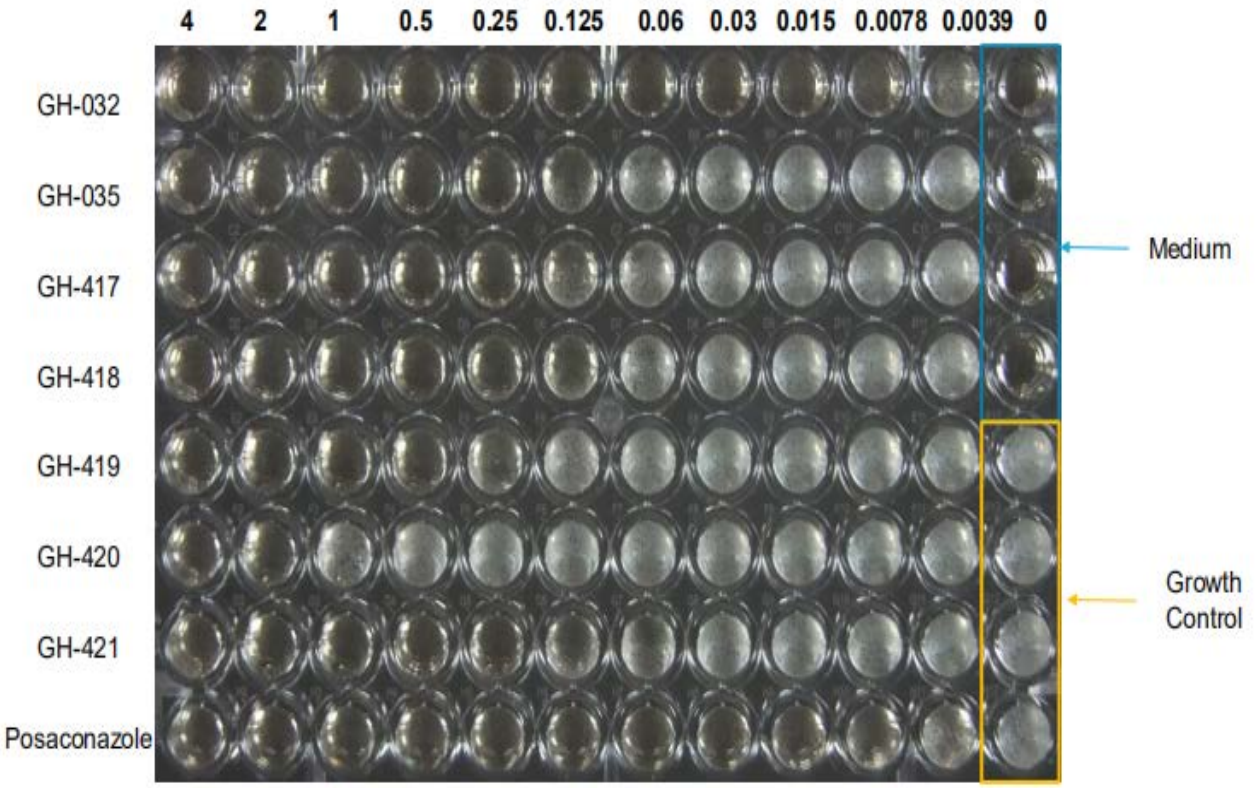
候选化合物GH-035的筛选：体外抑菌活性测试

Screening of candidate compound GH-035: in vitro inhibitory activity test

Compound ID	*Candida albicans* ATCC MYA-2876 Incubation time: 24h; 50% inhibition	起始浓度 (ug/ml)
GH-032	0.0078	4
GH-035	0.125	4
GH-417	0.25	4
GH-418	0.125	4
GH-419	0.25	4
GH-420	2	4
GH-421	0.125	4
Posaconazole	0.0078	4

MIC determination against Candida albicans ATCC MYA-2876 (μg/ml)



GH-035体内代谢成泊沙康唑（代号GH-032 ）的情况和泊沙康唑PK比较

GH-035 metabolized into posaconazole (code GH-032) in vivo compared with posaconazole

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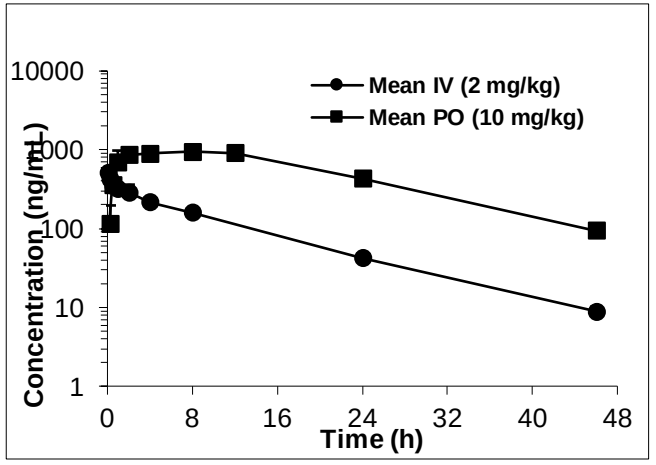
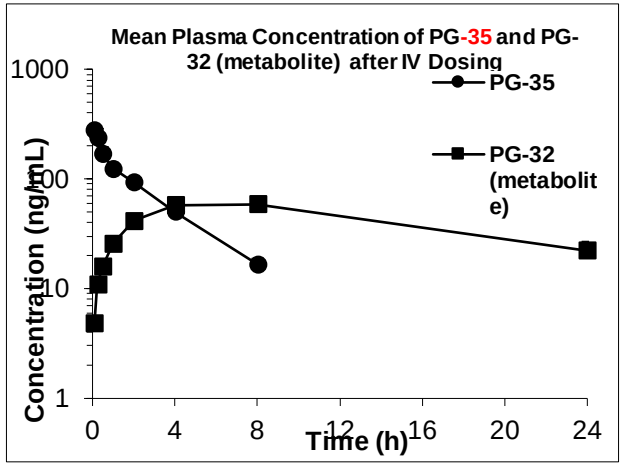
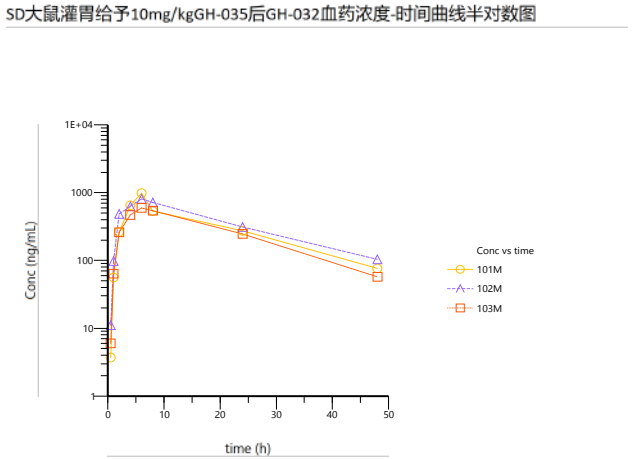
compound	Dose and admin.	Code of compound	C_{max} (ng/mL)	$T_{1/2}$(h)	$AUC_{0\text{-}last}$ (ng.h/mL)	Time of sampling
GH-032 (泊沙康唑)	IV (2mg)	GH-032	570	9.18	3793	48h
	PO (10mg)	GH-032	1031	10.3	22669	48h
GH-035	IV (2mg)	GH-035	305	2.41	560	24h
		GH-032(母药)	60.9	ND	984	24h
	PO (10mg)	GH-035	367	3.0	1894	48h
		GH-032(母药)	797	13.6	15211	48h



GH-032(泊沙康唑)IV and PO给药



GH-035 IV给药



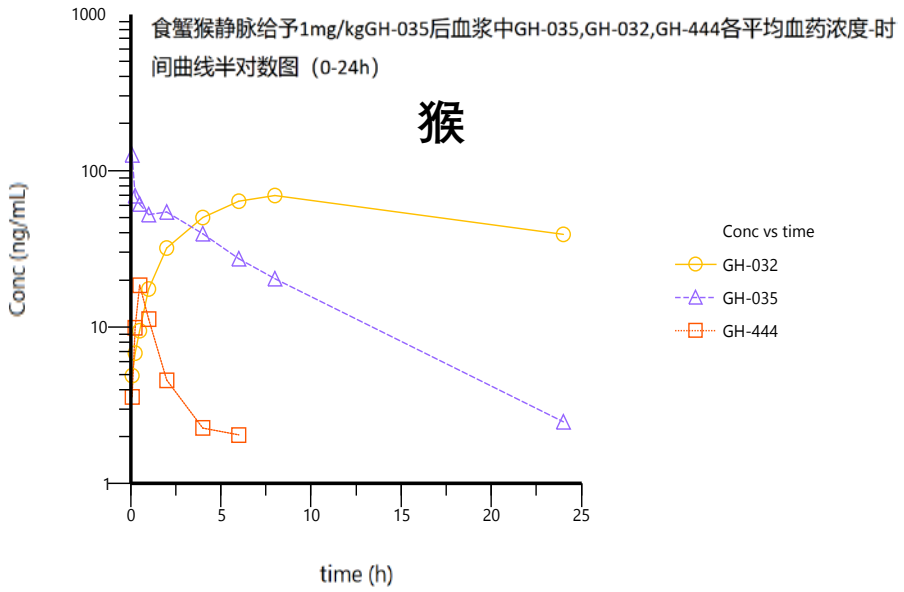
GH-035 PO给药后GH-032血药浓度

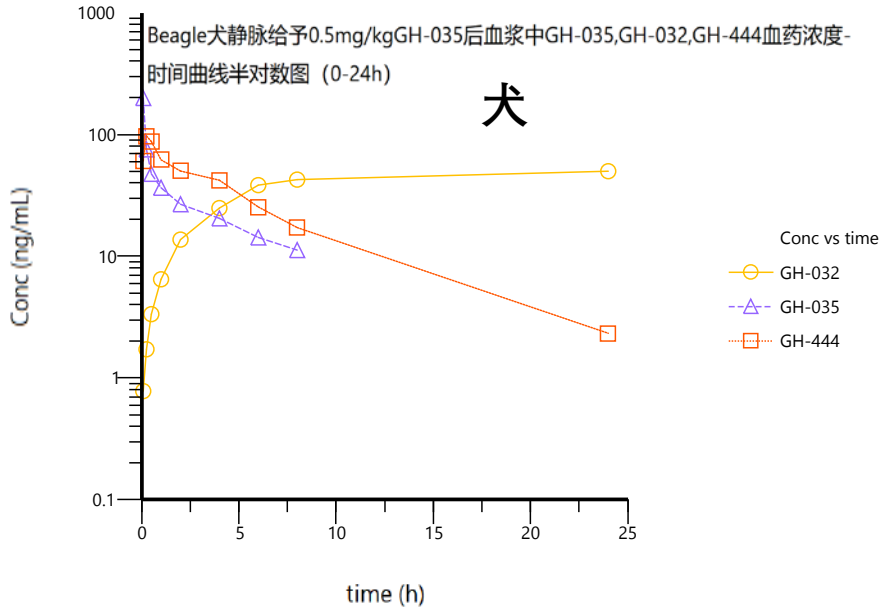
GH-035体内(犬 和 猴)代谢物及PK

GH-035 in vivo (canine and monkey) metabolites and PK

测各自血浆中GH-035(前药)、GH-032(泊沙康唑)、GH-444(氧化代谢物)的血药浓度-时间曲线半对数图

The blood concentration-time curves of GH-035 (prodrug), GH-032 (posaconazole) and GH-444 (oxidized metabolite) in their respective plasma were measured





GH-035在人肝细胞和全血中的稳定性

Stability of GH-035 in human hepatocytes and whole blood

化合物 compound	组织 tissue	浓度 concentration	半衰期/$T_{1/2}$	孵育时间 Incubation time	原药剩余 remaining compound
7-羟基香豆素 7-Hydroxycoumarin	人肝细胞 Human liver cell	1μM	16.0min	30min	27.9%
睾酮/testosterone		1μM	8.58min	30min	9.46%
GH-035	人肝细胞 Human liver cell	1μM	365min	4h	60.8%
	人全血 human whole blood	1μM		2h	98.3%

GH-035：替代型抗真菌抑制剂/GH-035： Alternative antifungal inhibitors

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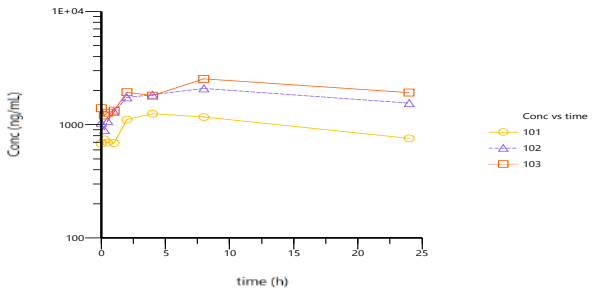
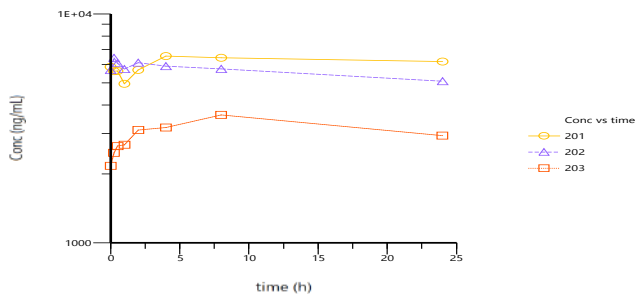
大鼠7天PK（分解物GH-032）/7-day PK (decomposition of GH-032) in rat

compound	dose（IV）	C_{max}(ng/mL)	AUC_{0-t}(ng*h/mL)	AUC_{0-inf}(ng*h/mL)
GH-035	15mg/kg	1900	3.9万	
	30mg/kg	5527	12.0万	
	45mg/kg	7580	17.6万	
GH-032	20mg/kg	6000		8.9万

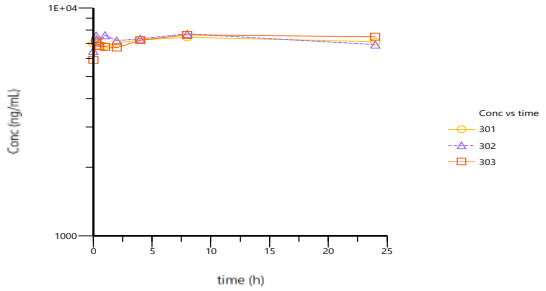
SD大鼠尾静脉连续7天给予15 mg/kg GH-035后GH-032的血药浓度-时间曲线半对数图



SD大鼠尾静脉连续7天给予30 mg/kg GH-035后GH-032的血药浓度-时间曲线半对数图



SD大鼠尾静脉连续7天给予45 mg/kg GH-035后GH-032的血药浓度-时间曲线半对数图



大鼠14天毒理/14-day toxicology in rats

- SD大鼠连续14天经尾静脉注射给予剂量分别为15、30、45mg/kg的GH-035药液（纯水配置），各剂量组动物体重（见图1），提示其对动物体重增长无明显影响/For 14 consecutive days, SD rats were given GH-035 solution (pure water configuration) at doses of 15, 30 and 45 mg/kg through the tail vein, and the animal body weight (see Figure 1) of each dose group showed an increasing trend, indicating that it had no significant effect on animal weight gain.

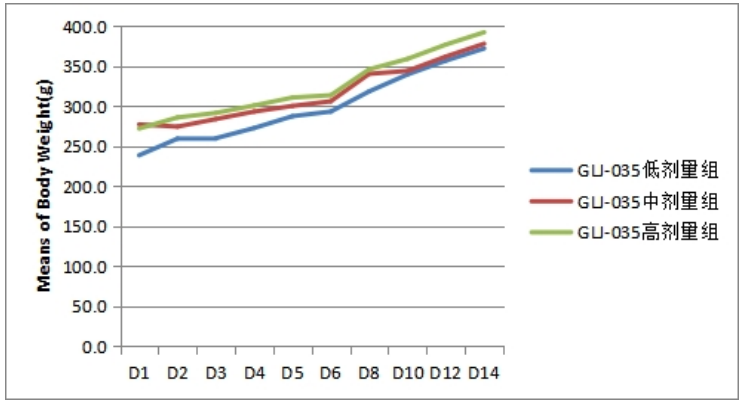


图1 GH-035低、中、高剂量组动物平均体重增长情况

Fig. 1 Average weight gain of animals in low, medium and high dose groups of GH-035

- 对大鼠大体解剖肉眼观察结果：GH-035低、中、高剂量组解剖动物，各动物心脏表面颜色、形状、大小等无明显毒性病理改变，其他器官表面和切面以及体积、颜色、质地等均未见明显异常情况/The results of gross dissection of rats were observed by the naked eye: GH-035 low, medium and high dose group dissected animals, and there were no obvious toxic pathological changes in the color, shape and size of the heart surface of each animal, and no obvious abnormalities were seen on the surface and section of other organs, as well as in volume, color and texture.
- 结论：本试验条件下，SD大鼠经尾静脉注射给予剂量分别为15、30、45mg/kg的GH-035药液，连续14天。各剂量组动物均未见相关毒性反应及死亡，提示其可能未见毒性反应剂量≥45 mg/kg/Conclusion: Under the experimental conditions, SD rats were given GH-035 solution at doses of 15, 30 and 45mg/kg through the tail vein for 14 consecutive days. No related toxicity and death were observed in animals in all dose groups, suggesting that there may be no toxic reaction dose≥ 45 mg/kg。

GH-035的CMC研究

CMC study of GH-035

一、 GH-035合成工艺研究/GH-035 synthesis process study

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◆ **CMC研究（1.6kg毒理批完成）/CMC study (1.6kg toxicology batch completed):**

API	研究内容/Research content		需求量/amount needed	小计/sub-total	总计/total	研究进展 Study stage
工艺路线开发/process development	工艺路线、及盐型、晶型研究结果的验证/Validation of process routes, salt and crystal form research results			工艺路线确定/validation of process		completed
百克级放大/scale up to 100g	工艺放大验证/validation of scaled process			早期制剂研究8g/Early Formulation Study 8g		completed
Scale up to 500g	5-fold scale up		500g	500g		completed
毒理批/toxicology batch	CMC	Batch test and quality study	20g	1.6kg	7108g	completed
	formulation（1000 vial）	Stability study and method development	471+50+5=534g			
	GLP toxicology	Toxicology study (beagle dog 550g)	300g			
		DMPK	10g			
工程批/engineering batch	CMC	Batch test and quality study	20g	2.5kg		On-going
		Influencing factors + accelerated test + long-term test	50g+35g+60g			
	formulation	formulation				
临床批/clinical batch（GMP）	CMC	Batch test and quality study	90g	2.5kg		prepared
		Sample retain	30g			
		影响因素/influencing factor				
		加速试验/accelerate test	35g			
		长期试验/long-term test	65g			
	Stability study	制剂/formulation				
	Clinical study	临床使用/clinical phase 1 study				

1.6kg的GH-035稳定性数据如下

The stability data of 1.6kg of GH-035

样品批号	杂质名称	RRT	检测日期	
			2021/12/26	2022/6/26
LV016265-001-T21001-03	T2103-D	0.44	0.01%	ND
	未知杂质1	0.69	0.01%	0.01%
	T2103	1.00	99.94%	99.92%
	未知杂质2	1.40	0.01%	0.01%
	未知杂质3	1.56	0.02%	0.03%
	未知杂质4	2.32	ND	0.03%
	总杂		0.06%	0.08%

三、制剂研究/Formulation research

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制剂处方摸索/Exploring for formulation prescriptions

API	Target contr. (mg/mL)	溶媒/Solvent	Initial pH	Formulated pH	Apparent	D5W 24H		0.9% Nacl 24H	
						20X	100X	20X	100X
GH-035 (Batch: LANT2390-56-2)	50 mg/mL	50% SBEBCD in pH 6.0 phosphate buffer	5.97	5.97	Clear	Clear	Clear	Clear	Clear

- 优化pH至6，可以得到澄清溶液，但6以上则不能溶清。pH 6.0 100X稀释后分别为5.2（D5W）和6.4（saline）
- Optimize the pH to 6 to obtain a clear solution, but above 6 can not be dissolved. pH 6.0 100X diluted to 5.2 (D5W) and 6.4 (saline) respectively.

中华人民共和国发明专利证书

证书号第4312838号

发明专利证书

发明名称：一种泊沙康唑衍生物、药物组合物以及其用途

发明人：祝力;吴伟;胡伟

专利号：ZL 2019 1 0104769.0

专利申请日：2019年02月01日

专利权人：北京国鸿生物医药科技有限公司

地址：100070 北京市丰台区航丰路13号院2号楼5层508室

授权公告日：2021年03月23日　　授权公告号：CN 110156763 B

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局长
申长雨

2021年03月23日

第 1 页 (共 2 页)

其他事项参见续页

现有产品线/Product pipelines

国顺康医药

公司内部代码 Int. code	类别 Category	适应症 Indication	靶点通路 Target	竞争优势 Advantage	分子特点 Molecular features	所处阶段 Developing stage	备注 Note
GH-035	小分子 Small molecule	真菌感染患者或高风险 People with fungal infections or those at high risk	真菌细胞膜 Fungal cell membrane	种类最优 BIC	水溶性，常规静脉注射 Water-soluble, conventional intravenous injection	临床前研发 Pre-clinical	专利授权 Patent granted
GH-019	小分子 Small molecule	实体瘤和其脑转移以及相关原发性脑肿瘤 Solid tumors and their brain metastases and associated primary brain tumors	ALK//ROS1/NTRK/ ACK/JAK/FAK etc.	种类最佳 BIC	多靶点激酶抑制剂，透过血脑屏障效率高 Multi-target kinase inhibitors with high efficiency in penetrating the blood-brain barrier（BBB）	临床前研发 Pre-clinical	国际专利公开 PCT, publishing
GH-304	小分子 Small molecule	AML/多种实体瘤 AML/a variety of solid tumors	CK1/CDK7/CDK9	种类第一 FIC	激活P53，多靶点，多机理杀伤肿瘤细胞 Activates P53, multi-target, multi-mechanism to kill tumor	分子优化 Molecular optimization	国际专利 PCT, publishing
GH-100	小分子 Small molecule	肝癌/胃癌/肾癌 Liver cancer/stomach cancer/kidney cancer, etc.	MET/SRC/CSF1R	种类第一 BIC	多靶点，多机理抗击肿瘤 Multi-target, multi-mechanism to kill tumor cells	分子优化 Molecular optimization	国际专利 PCT, publishing
GH-200	小分子 Small molecule	多种实体瘤 Solid tumors	PD-L1/TGF-beta	种类领先 FIC	双功能，多靶点，多机理提高抗肿瘤免疫力，抑制肿瘤 Multi-target, multi-mechanism to kill tumor cells	早期研发 Early R&D	国际专利申请中 PCT, applying

国顺康
医 药

计划和目标
Plans and goals

通过全公司员工的共同努力，在5-8年内，研发出1-2个创新药品种获批上市，实现公司的IPO。

Through the joint efforts of all employees, within 5-8 years, to develop 1-2 innovative drugs into marketing and realize the company's IPO.

- **2022年，创建公司**/set up company in 2022.
- **2023年，1-2个产品进入临床前开发**/1-2 products enter preclinical development in 2023.
- **2024年，完成1-2个产品的临床前开发，准备临床项目启动**/In 2024, complete the preclinical development of 1-2 products and prepare for the start of clinical projects.
- **2025年，1-2个产品处于临床开发阶段，数个创新产品处于临床前和早期研发阶段**/In 2025, 1-2 products are in the clinical development stage, and several innovative products are in the preclinical and early research and development stages.
- **2026-2027，1-2个产品上市申报，5-6产品处于临床不同研究阶段，3-5处于临床前和早期开发**/2026-2027, 1-2 product marketing applications, 5-6 products are in different clinical research stages, 3-5 in preclinical and early development.
- **2026-2027**，IPO准备/2026-2027, IPO preparation

本轮融资需求: 计划融资3000万

国顺康医药

Current financing needs: 30 million yuan is planned

1. **公司计划本轮融资3000万人民币，出让股权30%。融资主要用于将两个PCC分子推向临床一期。**
2. **公司资金使用大致比例：15%用于人员工资及福利；5%用于公司日常运行；80%用于项目的研究。**
3. **在获得第一个临床批件后开始下一轮融资。**

1. The company's current round of financing is a Pre-A round, planning to raise 30 million yuan and release 30% of the equity.
2. The approximate proportion of the company's capital use: 15% is used for personnel salaries and benefits; 5% for the daily operation of the company; 80% is used for project research.
3. Begin the next round of funding after obtaining the first clinical approval.

问题与讨论
Questions and discussions

感谢对国顺康医药的关心与支持！！！

Thank you for your support！！！

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谢谢！