

《世界首个“牙齿再生药物”将在日本进行临床试验》

据日本媒体报道，日本科学家将开展世界首个“牙齿再生药物”的临床试验，研究人员希望这种药物不仅能治疗先天缺牙症，最终还可以帮助后天缺牙和蛀牙患者长出新牙。



Photo/Pexels

Japanese scientists are set to kick off the world's first clinical trials of "tooth regrowth medicine" at the Kyoto University Hospital, The Mainichi reports.

据日本《每日新闻》报道，日本科学家将在京都大学医学部附属医院开展世界上首个“牙齿再生药物”的临床试验。

Researchers from the Japanese startup Toregem Biopharma are planning to enroll patients who were born missing some or all of their teeth from birth, a condition called congenital anodontia, for the trials.

来自日本初创公司Toregem Biopharma的研究人员计划招募一批从出生起就缺少部分

或全部牙齿(先天缺牙症)的患者参加这次试验。

The patients will receive an antibody treatment that deactivates a protein called USAG-1, believed to stop "tooth buds," which most people have, from developing into either baby or permanent teeth.

患者将接受一种抗体治疗，这种治疗可以阻断一种名为USAG-1的蛋白质，科学家认为这种蛋白质阻止了大多数人的牙蕾发育成乳牙或恒牙。

People with the condition conventionally resort to getting implants or dentures. However, Toregem's treatment could provide them with a "third option," as co-founder Katsu Takahashi explained in a statement, as quoted by Nikkei Asia.

患有先天缺牙症的人通常选择种植牙或假牙。然而，正如《日经亚洲》援引Toregem公司共同创始人高桥克的声明所提到的，治疗可能将为他们提供“第三种选择”。

The team is hoping to treat not only those who haven't been able to grow teeth from birth, but eventually also those who are simply missing teeth due to cavities as well.

研究团队希望不仅能治疗那些从出生起就无法长出牙齿的人，最终还能治疗那些因蛀牙而缺失牙齿的人。

A Phase 1 of the trial in September, which is designed to ensure that the treatment is safe, will involve 30 healthy male adult participants who are missing at least one back tooth. Phase 2 is tentatively scheduled for next year and will involve patients aged two to seven with congenital anodontia who are missing at least four teeth from birth.

9月份将开展的第一阶段试验旨在确保治疗的安全性，将需要30名至少缺失一颗后牙的健康成年男性参与者。第二阶段试验初步计划在明年开展，将需要招募年龄在2至7岁之间且从出生起至少缺失四颗牙齿的先天缺牙症患者。

The team has already successfully tested the treatment in animals with no observed side effects. In 2018, the team tested the drug on ferrets, which have similar tooth buds to humans, and found that new teeth grew successfully.

研究团队已经在动物身上成功测试了这种药物，没有观察到副作用。2018年，研究团队在牙蕾与人类相似的雪貂身上测试了这种药物，并发现雪貂成功长出了新牙。

"The idea of growing new teeth is every dentist's dream," Takahashi told Japanese newspaper The Mainichi last year. "I've been working on this since I was a graduate student."

高桥去年曾对《每日新闻》记者说：“让人类长出新牙齿是每个牙医的梦想。我从研

究生时期就开始研究这个了。”

重点词汇

set to 吃起来；动手做；打起来；认真着手

kick off 开始；踢掉；在足球比赛中)开球；强使离开

clinical trials 临床试验；clinical trial的复数

tooth 牙齿；齿；牙；齿状部分；使具齿状；给...装牙齿；刻齿；咬

regrowth 再生；再生长；愈合；再成长

Kyoto University 京都大学；日本；日本京都大学；日本东京大学

startup 启动；新兴公司

enroll 登记；注册；报告；服役；编入；清单；吸收；加入；写下

all of 至少；一共；足足

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