

► Patil and colleagues report that a homeopathic product (a heavily diluted extract from *Toxicodendron pubescens*, a plant known as Atlantic poison oak) is as effective as the prescription drug gabapentin in reducing inflammation and pain responses in lab-grown cells and animals.

Homeopathy groups worldwide have welcomed the study. And in Italy, where a proposal to label homeopathic products as ‘preparations’ rather than ‘drugs’ has provoked heated debate, homeopaths and their associations have said that the study’s publication demonstrates the effectiveness of homeopathy.

On social media and in the press, scientists in Italy have voiced concerns about the study. In his analysis, Bucci used his company’s software to detect two identical images that supposedly describe different experiments in one of the paper’s figures. He also found in the body of the text that the authors write that they had treated the animals with heavily diluted *Toxicodendron pubescens* (up to 1×10^{-30}), but the data in one of the figures show the effects for dilutions up to 1×10^{-8} . These discrepancies, as well as the image duplications, were also flagged by others on PubPeer, a platform to discuss scholarly articles. In another figure, Bucci spotted what seem to be the same data for two different experiments. He published his analysis online on 26 September and sent a detailed report to the editors of *Scientific Reports* on 3 October.

Patil attributes the duplicated images and the repeated data to mistakes that his team made while preparing the manuscript. The discrepancies between the text and the figures are the result of typos, according to Patil. The group will ask *Scientific Reports* to update the article with a correction. But “this does not change the scientific conclusions in any way”, Patil says. All the experiments were done “with utmost integrity”. The aim of the study was neither to criticize nor to support homeopathy, but to evaluate a homeopathic product using “pharmacological principles”, he adds.

Bucci says that he has also found that some of the study’s authors, including Patil, had written another paper³ published in *Scientific Reports* in 2016 that he says also contains inappropriate image duplications. Patil says that these occurred while converting the figures to high resolution when the researchers submitted the manuscript to the journal. The group will ask *Scientific Reports* to correct that article too, he says.

The spokesperson for *Scientific Reports* says that the editors are looking into the issues raised for both papers. “We take our responsibility to maintain the accuracy of the scientific record very seriously.” ■

1. Magar, S. *et al. Sci. Rep.* **8**, 13562 (2018).
2. Davenas, E. *et al. Nature* **333**, 816–818 (1988).
3. Chanchal, S. K. *et al. Sci. Rep.* **6**, 30007 (2016).

PUBLISHING

Europe’s open-access plan seeks US support

Plan S architect heads to the White House.

BY HOLLY ELSE

A month after European funders launched the ‘Plan S’ initiative, which demands open access to scientific papers immediately after publication by 2020, the plan’s creators have revealed more details — and are seeking support from US policymakers.

“We cannot afford to stand still or slow down. By the end of the year, if we don’t have more funders and statements of support, we will miss the boat,” says Robert-Jan Smits, the European Commission’s senior adviser on open access. Smits was in the United States last week to talk to research funders, scientific societies and representatives of the White House’s Office of Science and Technology Policy. “I’m going for business, not chit-chat,” he told *Nature*.

Smits has also named John-Arne Røttingen, head of the Research Council of Norway, and David Sweeney, executive chair of the funding body Research England, as the leaders of a task force that will decide how funders will implement Plan S. Sweeney accompanied Smits to the United States, along with Marc Schiltz, president of the Brussels-based advocacy group Science Europe, which published Plan S on 4 September.

The task force will release more details by the end of this year, and will consider whether publishers might develop new business models that “outsmart” the plan’s requirements, Smits says.

Initially, a coalition of 11 national research funders, including agencies in France, the Netherlands and the United Kingdom, backed the plan; on 24 September, the Academy of Finland joined the group. Plan S funders say that, from 2020, they will require scientists who receive grants from them to make the resulting papers free to read immediately on publication, with a liberal publishing licence allowing others to download, translate or otherwise reuse the work. By contrast, the US National Institutes of Health allows up to one year before papers must be made openly available.

The plan, which aims to flip journals to fully open-access publishing, also states that scientists can’t publish in ‘hybrid’ journals, which collect subscriptions but permit some papers

to be published openly for a fee. As written, Plan S would bar researchers from publishing in 85% of journals, including *Nature* and *Science* — unless the journals adapt their business models to open-access publishing. (*Nature*’s news team is editorially independent of its publisher, Springer Nature.)

But details remain unclear. Since the plan’s launch, for instance, researchers have wondered whether they would be complying with its intentions if they immediately made a copy of their accepted paper available online — even if the publisher kept the work paywalled.

In mid-September, Smits suggested at the conference of the Open Access Scholarly Publishers Association in Vienna that this would be consistent with Plan S, as long as the open version used a liberal publishing licence. That might mean that paywalled journals could respect Plan S without changing their publishing models. But it is not clear whether this would apply to hybrid journals. Details such as which licence would be acceptable for the archived manuscript, and whether the publisher or the author would retain copyright, also remain fuzzy.

ACADEMIC FREEDOM

Since the plan’s launch, an argument has also flared up over whether funders should be able to restrict where academics can publish. Britt Holbrook, a philosopher at the New Jersey Institute of Technology in Newark, co-wrote a blogpost arguing that the plan is unethical because regulating where researchers can publish impinges on academic freedom. His co-authors include some European scientists, such as biochemist Lynn Kamerlin at Uppsala University in Sweden.

But other researchers disagree. Peter Suber, director of the Harvard Open Access Project in Cambridge, Massachusetts, says it is reasonable for funders to restrict how their money is used. Suber says that taxpayer-funded research agencies have a duty to spend their money in the public interest.

Smits says it is a “pity” that the academic-freedom argument is being used, “because it stifles a lot of debate”. He says it will be key for the task force to think through the potential consequences of Plan S, to mitigate the risk of publishers developing new business models that the coalition “will regret after five years”. “We need to think three moves ahead, like a chess game,” he says. ■

“We cannot afford to stand still or slow down.”