Participant summary

24 March 2020

Results of the STOPHCV-1 study

Thank you

Thank you for taking part in the STOPHCV-1 study. You have helped us to answer important questions about how to personalise treatment with direct acting antivirals (called "DAAs") for people infected with the hepatitis C virus.

This summary describes the results of the study. If you have any questions about it, please speak to your doctor or research nurse.

We wrote this summary in March 2020. We may have more results from this study later but this document presents the headlines and the most important findings. This summary only includes results from this study. Other studies may find different results from the STOPHCV-1 study.

What was the STOPHCV-1 study about? And why was it needed?

Hepatitis C can now be cured in almost everyone using a 12 week course of DAAs. While 12 weeks may not seem that long, if people can be cured with a shorter course, then this will be an important finding.

In the STOPHCV-1 study we were testing different ways to cure hepatitis C infection with shorter courses of DAAs. It also tested whether adding an extra drug, called ribavarin, increased the chances of cure.

What about other studies looking at whether shorter treatment could cure Hepatitis C?

When we started this study, no other studies had looked at how treatment could be shortened. Even now, only 3 other trials have looked at this, and none of these explore treatment shorter than 8 weeks. So far STOPHCV-1 is the biggest study looking at this question.

Who took part in the STOPHCV-1 study?

The people who took part in the STOPHCV-1 study were:

- Adults
- Infected with the hepatitis C virus for at least 6 months
- Had the type 1 or 4 strain of hepatitis C
- Had minimal signs of liver problems,

and less than 10 million units of hepatitis C virus in their blood
- Gave written informed consent to join the study

The study took place in 14 clinics in England, Wales and Scotland.

202 people took part in the STOPHCV-1 study.

- Almost two out of every three people taking part in the study were male
- The average age was 45 years
- 99% had the type 1 strain of hepatitis C
- Just over one in three patients also had HIV

How was the STOPHCV-1 study carried out?

The STOPHCV-1 study took place between March 2016 and April 2019.

People who agreed to take part were split into 2 groups by random selection.

- 102 people were in the fixed duration group. They received DAAs for 8 weeks.
- 100 people were in the varying duration group. They received DAAs for between 4 and 7 weeks, depending on how much hepatitis C virus they had in their blood at their screening visit.

People were also split into another 2 groups by random selection.

- 100 people were in the ribavirin group. They received ribavirin with their DAAs.
- 102 people were in the no-ribavirin group. They took only the DAAs.

So overall, each person could be in one of four different groups:

- DAAs for 8 weeks.
- DAAs + ribavirin for 8 weeks.
- DAAs for between 4 and 7 weeks depending on the screening levels of virus in their blood.
- DAAs + ribavirin for between 4 and 7 weeks.

Regardless of which group they were in, anyone who did not get cured of their hepatitis C virus with this first round of treatment received another 12 weeks of a different DAAs combination + ribavirin. This was to give everyone in the study the best chance of being cured overall.

We followed up how people were doing for 24 weeks after finishing each treatment course. We wanted to see if:

- The initial shorter course was as good as the initial longer course of DAAs overall (that is, including both the first and if needed, the second course).
- Whether adding ribavirin increased the chances of curing with the first course of DAA.
- Whether ribavirin had other benefits, like reducing the chance of the virus becoming resistant to the DAAs.

We also looked at the side-effects people had whilst on the study and what happened to their quality of life.

What did the STOPHCV-1 study find?

The STOPHCV-1 study found that everyone who took part in the study was cured of hepatitis C on either the

first treatment course, or, if needed, the second treatment course. This means we can be confident that, overall, giving less DAAs upfront does not affect someone's overall chance of being cured.

However, more people who got 8 weeks treatment initially were cured on this first treatment than the people who got shorter treatment initially.

Overall 91 out of every 100 people in the 8 week treatment group cured on their first treatment.

Whilst the study was going on, an independent group of experts was looking carefully at the results to make sure that the potential risks did not outweigh the potential benefits. In April 2017, they changed the amount of drug people in the varying group got, from between 4-6 weeks to between 4-7 weeks.

Before April 2017, on average people in the varying group got 32 days (around 4.5 weeks) of treatment. 36 out of every 100 people were cured on this initial treatment. Everyone else was cured on their second treatment.

After April 2017, on average people in the varying group got 39 days (around 5.5 weeks) of treatment. 72 out of every 100 people were cured on this initial treatment. Everyone else was cured on their second treatment. The extra week of treatment doubled the cure rate.

Everyone who had reduced the virus in their blood to below levels that the tests can find by three days after starting DAAs was cured, regardless of how long they took their initial treatment for. Having undetectable virus seven days after starting treatment also increased the chances of being cured by the first course of DAAs.

Did having ribavirin with the first course of DAAs make a difference?

There was a suggestion that ribavirin increased the chance of cure in people on the shorter courses of DAAs. But, overall these differences were too small for us to be sure.

We did find that ribavirin reduced the risk of the virus developing drug resistance if the first course of treatment did not cure people. However, even in those people whose virus did have some DAAs resistance after the first course, the second treatment course still cured their hepatitis C.

Was there any difference in the results in people who had HIV?

The results were the same in people with or without HIV.

What about safety?

We found that serious or severe side-effects happened in only 5 out of every 100 people. People in the groups who had longer initial treatment or ribavirin were no more likely to have a serious or severe side-effect than those in the groups who had shorter treatment or no ribavirin. There was no difference in people with HIV. Everyone who had a serious side-effect made a full recovery.

What do these results mean?

What do these results mean for you?

Because everyone was cured in this study, these results make no difference to you now. However if you get hepatitis C again in the future, these results show that each week of treatment between weeks 4 and 7 can have a big effect on the chances of cure.

What do these results mean for how Hepatitis C is treated in the future?

These results suggest that people with hepatitis C who take a standard length course of DAAs will have a higher rate of cure than people who take a shorter course.

Some people find it hard to take 12 weeks of treatment. If they have a low level of virus in their blood at the start of treatment, and take 4-7 weeks of treatment, they may have a good chance of cure. Adding ribavirin may help reduce the chance of their virus developing resistance if this shorter course doesn't cure them. If they have undetectable or very low levels of virus 3-7 days after starting treatment then they will have a much better chance of cure even if they aren't able to take a full treatment course.

The study included a wide range of people with hepatitis C infections with type 1 strains, so the results apply widely to these group of infections.

What difference will these results make?

These results mean that the standard treatment course for hepatitis C (strain 1 or 4) will stay the same until future studies find other ways to improve it.

Conclusion

Thank you for taking part in STOPHCV-1 study. You have helped us to answer important questions about how to cure hepatitis C infection. We hope that the results of this study will help patients in the future. We are very grateful for your contribution.

Further information

If you have any questions about the STOPHCV-1 study, please speak to your hospital doctor.

The STOPHCV-1 trial is registered with the ISRCTN registry. The registration number is 37915093. You can see more details about the trial http://www.isrctn.com/ISRCTN37915093

You can also find out more information about the STOPHCV-1 trial at https://www.ctu.mrc.ac.uk/studies/all-studies/s/stop-hcv-1/

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