

Survey Sent Out to People with Chronic Inflammatory Diseases

The following are the results from a survey made by CIDosis iGEM 2020 Team from University of Copenhagen. It is a full representation of our survey & some of our responses.

Questionnaire for CIDosis - Patch to monitor inflammation



Hi! We are a team of 9 students from University of Copenhagen. We are participating in a synthetic biology world championship and this year, we are trying to develop a patch containing genetically modified yeast, that can monitor inflammation levels in patients with chronic inflammatory diseases. The patch will do so by collecting sweat from the skin and produce a colour change if the levels are higher than normal!!

Therefore, we hope that you can help us out by answering some questions and giving us insights into how the patch can be best designed for your use. The questions comply with all data protection and privacy laws, and no personal questions have been asked, except your age group. We will keep the results with us till December 2020.

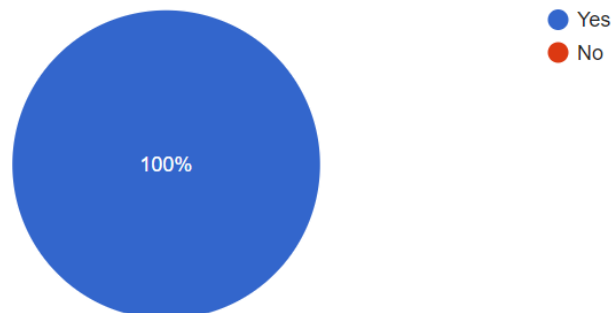
The survey should not take more than 3 minutes.

Thank you for helping us out! We really appreciate it.

Best,
CIDosis

Are you over 16 years of age and do you consent to giving information pertaining to your age and disease?

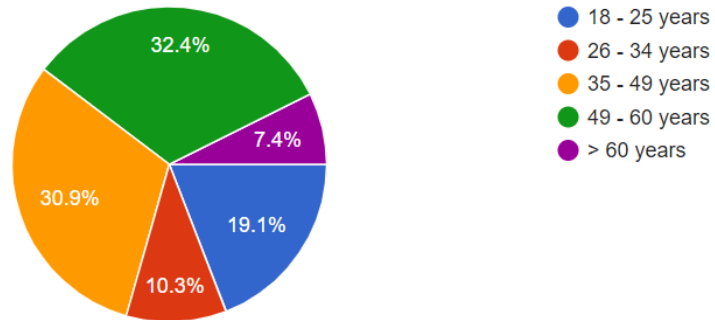
68 responses



Personal Information

What is your age?

68 responses



The picture below is a representation of the different responses.

Which chronic inflammatory disease do you have (ex. Rheumatoid arthritis, inflammatory bowel disease, eosinophilic esophagitis, Crohn's Disease, Colitis, Hepatitis, etc.)?

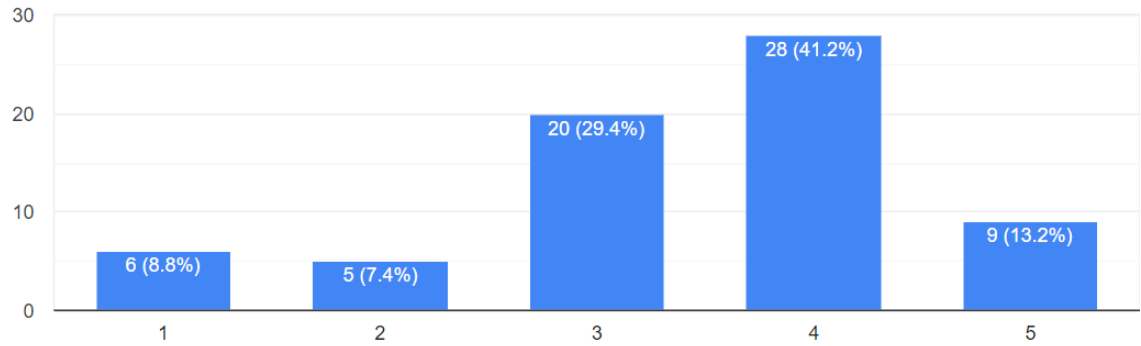
68 responses

Psoriasis arthritis
Colitis ulcerosa
Rheumatoid arthritis
Colitis
Crohn's Disease
Crohn's Disease
Crohns Disease
Hidradenitis Suppurativa
Colitis ulcerosa, multiple allergies
Crohns disease
Stofskiftesygdom
Systemic skleroderma
Nedsat lungefunktion
Stor kars vaskulit
Rheumatoid arthritis, IDDM, psoriasis,
inflammatory bowel disease
Systemisk Sklerodermi

Medication

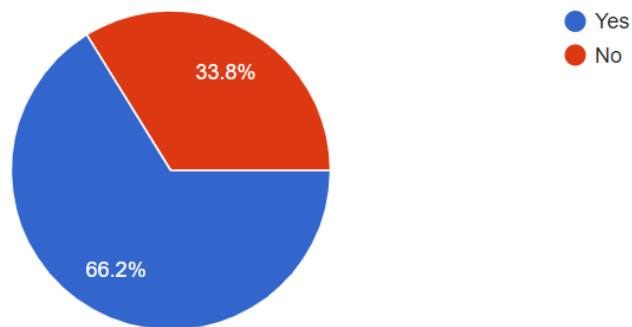
To what degree, on a scale of 1-5, are you satisfied with your current treatment (1 being the least and 5 being the highest)?

68 responses



Did the doctor change your medication before the current one?

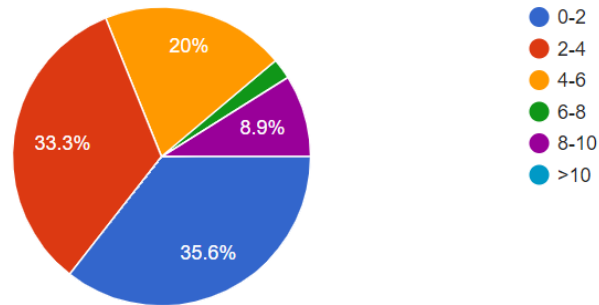
68 responses



Change in medication

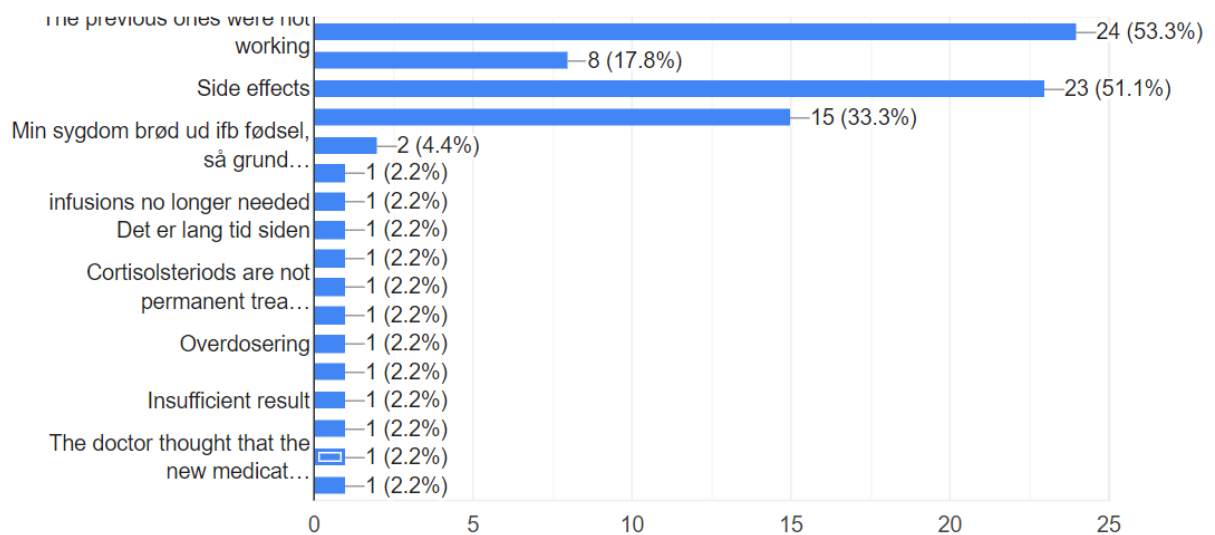
How many different medications did your doctor prescribe for you before the current one?

45 responses



Why did the doctor change the medication(s)?

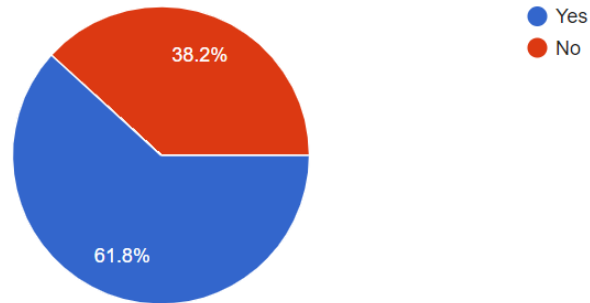
45 responses



Follow-up Routine

Do you undergo periodic tests to check the effectiveness of the treatment (ex. once a week, once a month)?

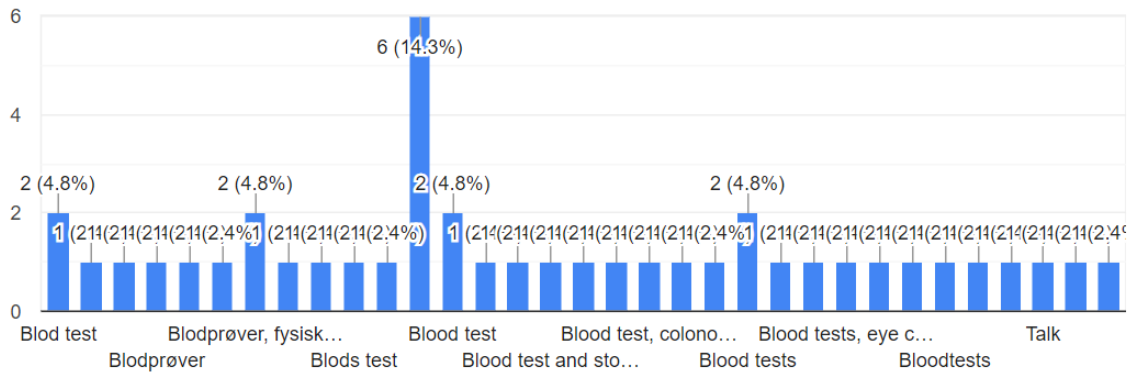
68 responses



Follow-up Continued...

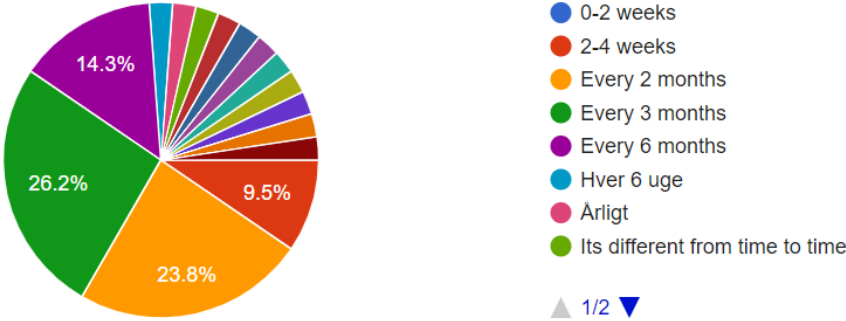
What kind of a routine check-up do you follow to check the effectiveness of your current medication (ex. blood test)?

42 responses



How often do you need to go to check the effectiveness of your current medication?

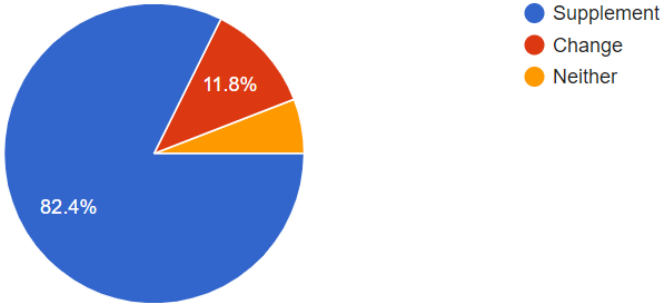
42 responses



CIDosis

Would you be willing to supplement or change your current testing method with a sweat patch worn on your skin?

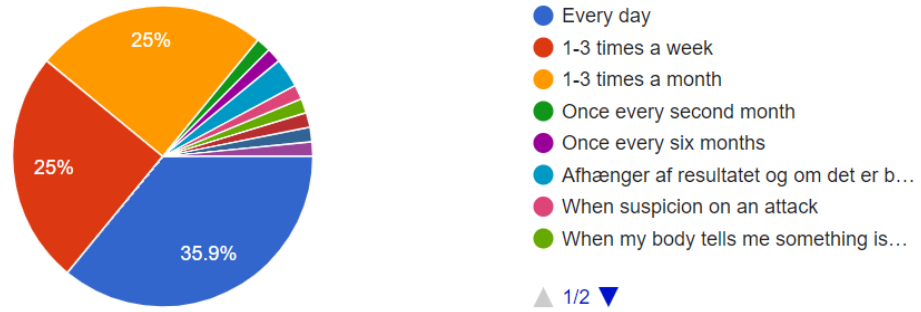
68 responses



What is CIDosis

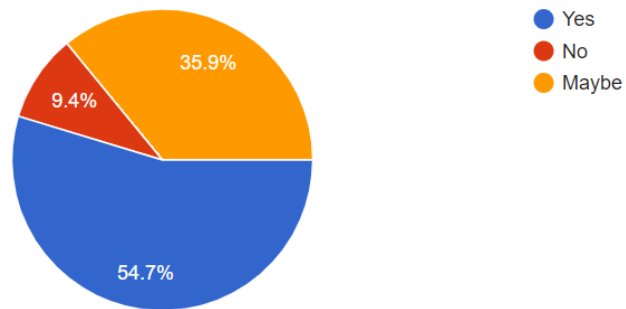
How often would you be willing to wear our patch?

64 responses



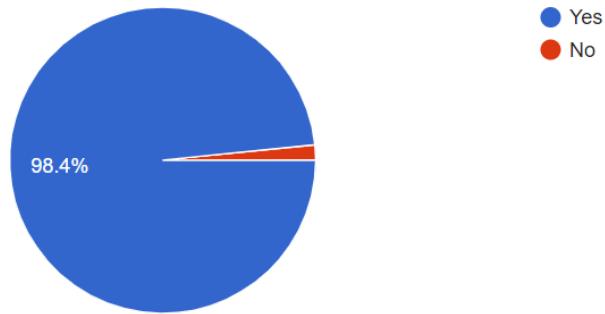
Would you be okay with the patch containing genetically modified yeast?

64 responses



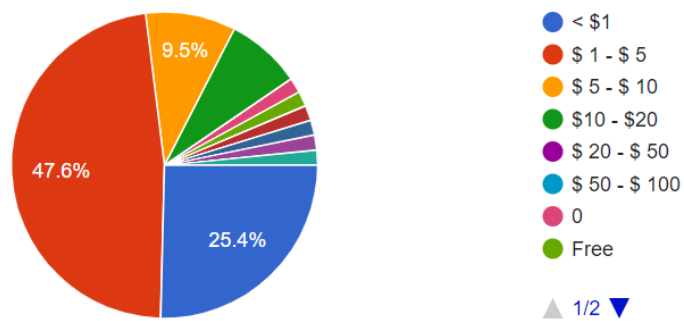
What if we told you that it will be the same type of harmless yeast that is used for baking or to make beer, but this time it will also have an additional function to detect inflammation and show a colour change? Would you be willing then?

62 responses



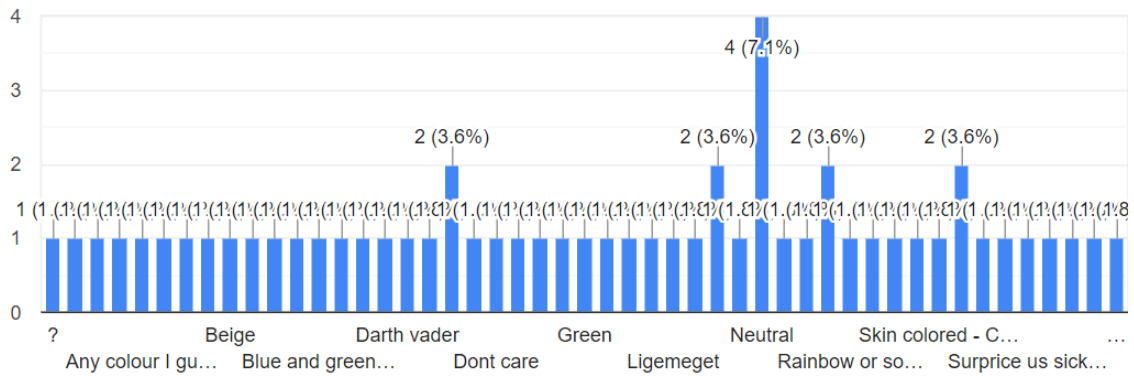
If the cost of the patch is not covered by the government, and assuming you need 50 patches in a year, how much would you be willing to pay PER PATCH?

63 responses



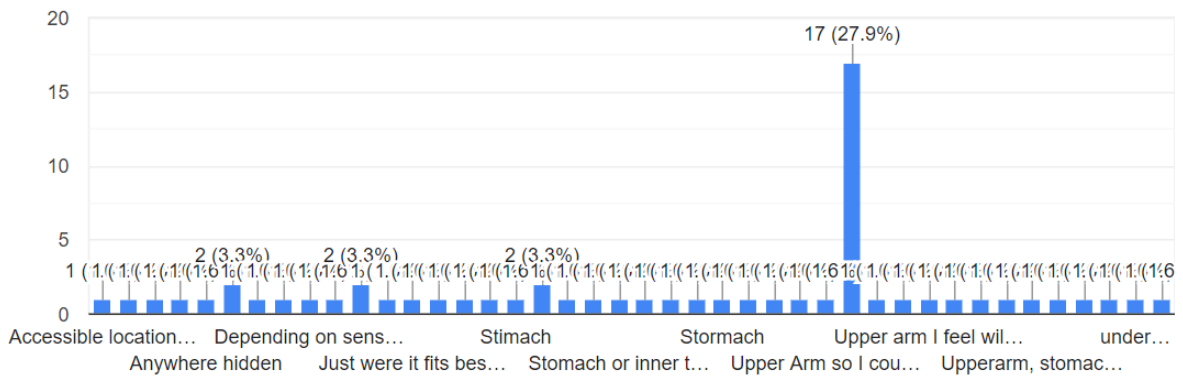
What colour or design would you like the patch to be?

56 responses



Where would you like to wear the patch (ex. upper arm, thigh, stomach etc)?

61 responses



Concerns over CIDosis

Why would you be unwilling to wear the sweat patch?

4 responses

- Det giver ikke umiddelbart mening
- Because I'm currently very happy with my medication and not feeling any pain or having inflammation. So I don't think it would be a match for me
- I swim a couple times a week if it has to stay on for longer time is unpractical
- I'm not sure about the efficacy and sensitivity of such a testing method.

The picture below is a representation of the different responses.

Feedback

Are there any questions or areas we have not covered in this questionnaire that you think would be relevant for us to design the sweat patch?

40 responses

No

Jeg overvejer om det overhovedet vil være relevant. Jeg kan mærke når jeg har inflammation og jeg skal alligevel have taget blodprøver hver måned for at tjekke levertal osv. derudover har jeg i forvejen meget høje udgifter til kosttilskud og medicin (+1000 kr pr måned), så det skulle enten være virkelig billigt eller give en meget overbevisende fordel, før jeg ville overveje at bruge sådan et produkt

Questions based on comfort with time duration required for the patch to show the result.

How often should it be changed? Where do you dispose of it? Is it allowed to remove the yeast from the laboratory when it is GMO?

How does it stick (i.e. anything uncomfortable that users would need to know about)?

That the patch does not irritate the skin And is not too big

Det virker meget indforstået

It is important to have a clear and concise questionnaire. It is also important to have a clear and concise questionnaire.

No, good luck

Ingen

Some patients with certain autoimmune diseases, e.g untreated thyroid conditions or Sjögren's syndrome, produce very little sweat as autoimmunity attacks the exocrine glands

Size?

Size of patch, glue used (I eg. do not take well normal plasters), how breathable the plaster is

Easy to Rip off

Nej