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Project Managers	To be appointed	

The MyMelanoma Cohort Study

Information for people considering participation

You are being asked to consider taking part in a research study. This information explains why this research is being carried out, and what it would mean for you. Please read this most carefully. If you have any questions at all then please contact us either by e-mail, text or telephone.

MyMelanoma E mail address will be added here
MyMelanoma Mobile phone number will be added here

Project Overview

MyMelanoma is a web-based research project designed to recruit a large body (or cohort) of melanoma patients to help answer some of the most important and currently most difficult to answer, questions about melanoma. The project will run in three phases.

- In Phase 1, MyMelanoma seeks to recruit melanoma patients who have inherited mutations which increase the risk of melanoma. The purpose of the study is to increase what is known about these high risk genes for genetic counselling. Are carriers of these genes at increased risk of other cancers as well as melanoma. This is very important information required in order to justify appropriate screening. This will be a collaborative study with the International Melanoma Genetics Consortium GenoMEL www.genomel.org. A secondary purpose of phase 1 is to optimise communication systems in the online service. It will be possible for any melanoma patient treated in the NHS to register their interest in participation when Phase 3 opens.
- In Phase 2, MyMelanoma will recruit any melanoma patient treated in the NHS who wishes to participate. The study in phase 2 will collect information from the participants and seek their consent to access their tumour samples which are stored in NHS laboraties. We will not however collect fresh samples
- In Phase 3, data collection will continue from recruited and new participants but sampling will also take place of blood and faeces for some of the participants depending on where they are in their treatment status.

Phase 1 is being funded initially by monies raised by the funding committee and is managed by the MyMelanoma Institute at the University of Leeds in collaboration with the University of Oxford. Phase 2 and 3: funding from other sources will be sought to recruit an estimated 20,000 UK melanoma patients via this same platform. The overriding aim of MyMelanoma is to give melanoma patients greater control over the direction research into their disease should take, and to answer questions which are most important for them.

Most people who have had a primary melanoma removed never have any further recurrence (secondary cancers): they have treatment, they attend the hospital for a period of time and all is well.

Some do have further problems and this project is largely about predicting better who is more likely to have further trouble and how we might prevent recurrences. For people who do have further problems, new treatments are used which are broadly called "immunotherapies" or "targeted therapies" and the research we want to do is about developing tests which will tell us which treatments are most like to help every individual patient (personalized medicine). We also want to know more about the side effects of these treatments both during treatment and in the very long term.

In this programme of work we will concentrate on melanoma of the skin or rare subtypes arising under nails, on the sole of the foot, on the palms or on the genitalia. We are unable to include melanoma in the eye as yet but this will be considered later as a possible option.

What is different about MyMelanoma?

It will be an "accessible resource", meaning, the information generated by MyMelanoma will be made available to melanoma researchers anywhere in the world so that progress can be made as quickly as possible towards answering our questions. In this respect (and in other ways) the MyMelanoma Cohort is modelled on the *UK Biobank* which is being used to generate major progress in health research. All the information will be anonymized. That is that the information generated about melanoma from the participants, from health records and from testing samples will form a resource (or dataset) for medical research of considerable value, but researchers using the data could never know who supplied the data. Put another way, the researchers would not be able to recognise you within the dataset. There is information later about how safety of data will be ensured.

- The study's name "MyMelanoma" reflects the fact that two people, Imogen Cheese and Sean Guinness approached us wanting to "make a difference" for melanoma patients. They wanted to allow melanoma patients to play a significant role in determining what are the important questions that need answering and they wanted to contribute to that endeavour.
- The MyMelanoma philosophy is that by harnessing the power of the internet to collect data from very many patients and linking that with information collected as part of those patients' clinical care, we can create a data resource which will foster international efforts to work together to make things better for melanoma patients sooner.

What questions does MyMelanoma aim to answer?

Ultimately, the MyMelanoma aim is to collect data from 20,000 melanoma patients in order to answer what we see as the most important questions for melanoma. Essentially those questions are:

- Most people who have had a primary melanoma removed never have any further recurrence (secondary cancers). How can we better predict who will relapse (come back as secondary melanoma) after removal of their primary melanoma or melanoma in lymph node, so that these patients might be offered treatments to prevent that relapse (adjuvant therapy)? The flip side of this is that if the prediction is accurate then we can spare patients who are unlikely to relapse the side effects of treatment.
- What lifestyles reduce or increase the risk of relapse, so that better advice might be made available to melanoma patients about how they could live most healthily? For example, is there a particular diet which might make a difference?
- Treatments given for secondary melanoma or to prevent secondary melanoma (adjuvant therapy), are known as "targeted" therapy or "immunotherapy". Immunotherapy in particular has significant side effects but overall offers the best hope of long lasting benefit so we need to better predict who will benefit from immunotherapy and who will not, so that patients and their medical teams can balance risk of relapse with treatment costs in terms of quality of life?
- How can we better predict benefit from other forms of therapy, so that patients can be offered the best treatment for them (personalised medicine)?

- Which patients on immunotherapy will develop life changing side effects and how can we best manage the side effects to minimise long term consequences?
- What is the impact of having melanoma at any stage of diagnosis or treatment have, on quality of life for the patient and their family? What cannot people do, how do they feel?
- For *rare families* in which family members are at high risk of melanoma because they have inherited the same rare genetic mutation, is there an increased risk of other cancers too?

The complexity of these questions is the reason why we will need to recruit a very large number of people as cost effectively as possible, collecting information from those people directly as well as adding to that information from their medical records. When we show that the study is feasible in Phase 1 we will seek funding for Phase 2 wherein we will also carry out tests on samples provided.

What if I want to take part in the study?

It is very important that you read this information carefully so that you really know what taking part means for you. One of the most crucial issues for the MyMelanoma team is the obligation to safeguard personal data. The study has been set up to maximise the safety and the details are explained in the following text.

Am I eligible?

1. If you have been diagnosed with a melanoma or had treatment for melanoma then you are eligible to take part.

2. If you are invited to take part by a MyMelanoma participant because of your family history. A small number of people who are family members of participants with a strong family history of melanoma or melanoma and other cancers will be able to take part by invitation of that participant, even if they have not themselves had a melanoma. When a melanoma patient registers for the study they will be asked about their own history of cancers and of close relatives. If the patient has has 3 or more primary melanomas, or if they have had just 1, but two other close relatives have also had melanoma or other cancers such as lung or brain cancer or cancer of the blood and lymph nodes, then the MyMelanoma team will get back to the patient and discuss whether they would be willing to invite family members ot take part.

What happens next?

Step 1: Please read this Information carefully, ask questions if you need to by *phone* or *e-mail*, in order to help decide whether you want to proceed or not.

Step 2: If you are happy to register (which means only that you are interested in considering taking part) then do so by clicking on this button. REGISTER (If you are reading a paper version information sheet visit MyMelanoma to click the button).

Step 3: The **REGISTRATION** step will require you to provide:

- Your email address and a telephone number (if you would prefer to proceed by telephone rather than e-mail at this stage). In the long term all participants must have an email address to take part, or enlist the help of a relative or close friend who has email. Study communication is via email and data collection is very largely digital which is why this is

required. Having registered your name and email address these details can be used as a temporary login to enable you return to the Participant Section of MyMelanoma to access the Consent form. These details will only be retained for a period of 3 months if you later decide you do not wish to take part, when these details will be deleted. If you decide to take part in the study then the details will be retained for as long as you continue to take part. In Phase 1 these contact details will be stored in a contact management system called Bitrix24 (you may see emails from us with the name of the system referenced, hence why we are mentioning it specifically here). There will be no details stored in Bitrix 24 except contact details and a "route to entry" 1 to 5 (see diagram below). Bitrix24 is commercially available contact management system, and is fully compliant with European GDPR legislation. By design, we separate personal clinical data from systems which hold purely contact information – this is a requirement of 'safe systems design' and is an additional protection to safeguard any inadvertent or malicious use of very sensitive information..

- Some basic details about your health, namely when and where your primary melanoma was diagnosed and what treatment you had then and in the period since (if any). Figure 1 below illustrates the different ways to take part in MyMelanoma. By telling us the approximate date of diagnosis we can determine which route is most appropriate for you and thus indicate what participation would mean for you. So, for example, people diagnosed in the last 6 months, we would invite them to take the Route to Entry 1, and those just about to start immunotherapy we would invite them to take Route to Entry 2. This information will not be collected via Bitrix24, the information will be added by the participant using a Googleform labelled with your study number only. The linked but anonymous data will then be stored in the secure data bases at the University of Leeds.

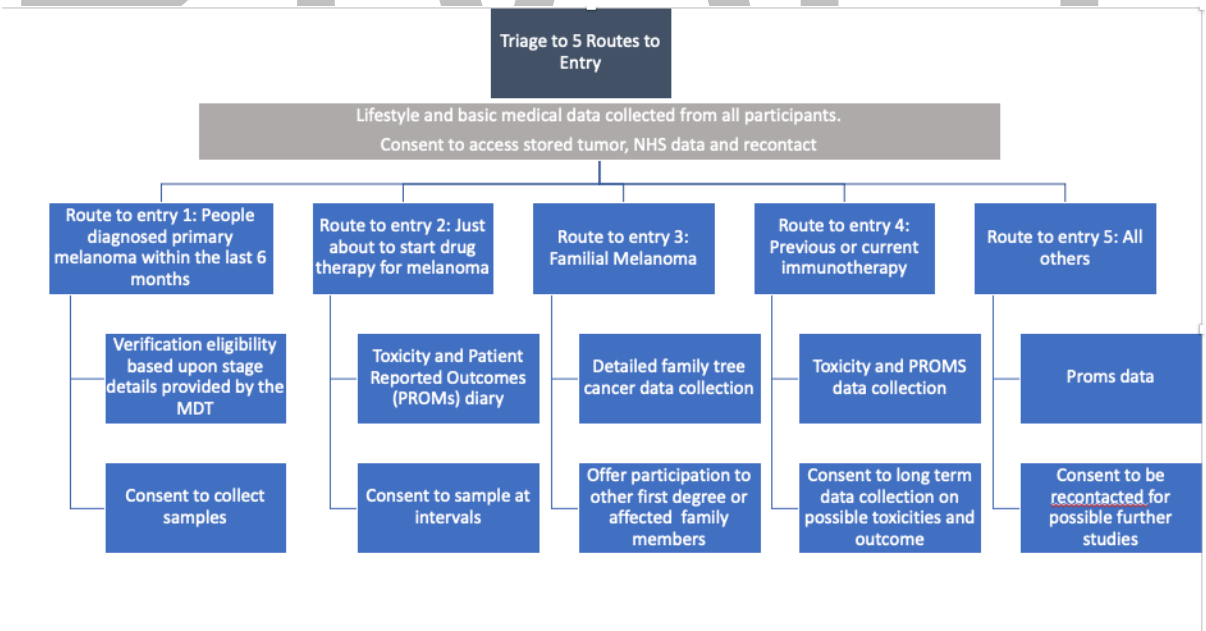

Figure 1: Different ways to take part: This figure shows the different ways that people can take part in the study.

Step 4: After registration, the MyMelanoma team will send you a link to access the consenting process for your specific Route to Entry. The information provided for each route will be slightly different as we will tailor the data collection to the particular questions we are researching. If you decide to take part after carefully reading that information, then you will be able to access the consenting process by clicking on the icon labelled **CONSENT NOW**.
If you consent to take part you will automatically be allocated two numbers: your "study number" (which you will need to enter your data into the system) and a unique identification (ID) number which will be used to identify any research information you supply. Only the MyMelanoma team will know that the ID number belongs to you, not even you will know your ID number. These two numbers will be linked by a "key" which only the MyMelanoma team will have access to and this information will be stored on a computer (server) at the University of Leeds, which is specially built to comply with the UK Governments standards for the storage of very sensitive health data. We will call this the "supersafe server".

Step 5: After consenting, a computer link will pop up on your computer screen which will direct you to two separate questionnaires we'd like you to complete. The first is a questionnaire about your lifestyle. This questionnaire has been developed by the UK Biobank and the data from this questionnaire is stored on computers at the University of Oxford. You will be sent your own personal link to the questionnaire so that the information you supply will be anonymous to the University of Oxford.

The second is a questionnaire about you, your general health and that of your biological relations. This information is recorded using only your study number as an identifier and the information will be entered into a Google form which will then be downloaded into the same supersafe server described above. MyMelanoma will know that the information comes from you, because we will recognise your study number, but no one else will know that it is yours.

Step 6: Some participants (such as those taking part in Routes to Entry 1, 2 and 3) will be asked to provide samples including blood and stool/faeces (in Phase 2 subject to funding). At the moment no sampling is taking place, but in the future, when other people take part we hope to be carrying out sample collection. Usually these blood tests will take place at the hospital at the time of hospital apointments and the samples will be processed there or transported to the MyMelanoma sample hub which will probably be at the UK Biocentre in Milton Keynes subject to funding.

Step 7: People who consent to take part will receive emails at intervals giving news about how the study is progressing, news items from other participants, offers of new projects to consider taking part in and seeking information on any new treatments received.

Participants will of course be able to unsubscribe from this at any point.

If I take part in Phase 1 can I later be part of Phase 2 and 3 also?

If phase 1 is successful and funding is obtained then yes you would remain part of that cohort. In that case, it is likely that you would be asked to provide a little more information and perhaps donate blood and stool samples. The team would contact you at that stage via your preferred method i.e. telephone, a text, or email.

What information will you collect about me and what happens to it?

3. **Information that you enter yourself**:
    - Your contact details and summaries of any communications with you will be stored on the Bitrix24 contact management system. No additional data, such as your medical details, will be stored in Bitrix24. You can opt out at any time simply by contacting us to request 'opt out'.
    - The Universities of Leeds and Oxford are managing the collection of lifestyle and family history information, using questionnaires designed specifically for the purposes of eliciting relevant participant information. Data collected by the Universities will be held securely in University data repositories, and will be maintained separate from any participant contact information, in line with good data governance practices. Eventually in Phase 2 of the research, all of this lifestyle and history data will be combined and held within PHE's secure national data repository, so that reasearchers can link clinical data from hospitals and primary care with the lifestyle and history information in properly controlled and ethically governed research studies"

2. **Information about your health in the NHS**:
    - You will be asked to agree to MyMelanoma following your health for many years, in order to research how lifestyles affect health in the long term. This information will mainly be collected passively from medical records using NHS data. This is a very important part of the study and agreement to this at the beginning is needed in order to participate. We also need your permission to access your medical and other health-related records in confidence for many years (even if you lose mental capacity or die). Essentially we cannot do the study without this information so, if you don't wish to agree to these parts of MyMelanoma, you will unfortunately not be able to join the study.
    - To be clear: if you agree to take part in this research we would gather data from different sources and link it securely in Public Health England's dedicated cancer information systems. PHE have the legal authority to gather and store patient confidential clinical cancer data, and nationally agreed protocols for anonymisation, data governance and research use, so it is the logical place to host this research data.
    - Information that PHE will eventually hold for participants in this study comes from:-
        - Information you contribute your self
        - Records stored by Public Health England (PHE) collected from a number of sources eg cancer registration data. When a new cancer is diagnosed in any person in the NHS, the hospital provides information to PHE, so that PHE can monitor trends, much as occurred during the COVID-19 pandemic. Trends in the number of cancer cases, and survival from that cancer
        - records of registered deaths and the cause of death

- records of hospital admissions in the form of codes for conditions treated
- Codes for medical conditions stored by GP services in the UK collected for the same reasons as for PHE, to look at trends over time.
- Records of drugs prescribed

3. Information about you in the Accessible Resource

- The data which you have contributed and the data from PHE will be exported in a fully anonymised form when sufficient information has been collected and checked, to be of use to researchers, to a data hub to which bona fide researchers will apply to for access. A committee will review applications for access to the data based upon employment by bona fide research organisations or scientific papers published. This approach has been pioneered by UK Biobank, and the vision of MyMelanoma is that of sharing information between melanoma researchers around the world resulting in the fastest progress in research on melanoma for the benefit of patients. The UK Biobank web page details the research the BioBank has supported and we hope that MyMelanoma will have similar value for melanoma patients in the future.
- We stress the importance of anonymity: information used for research must never be identifiable so the data will not contain information such as name, date of birth, precised date of diagnosis, postcode or hospital treated.

How will my information be kept safe when the linkage between the information I provide and my NHS records occurs?

Confidentiality of participants' data is a top priority for MyMelanoma. Stringent security measures to prevent unauthorised access and/or use are in place, including: physical and logical access controls, computer / device security measures, confidentiality agreements and staff data protection training.

It is necessary to be able to link participants' identifiers with their personal data (including any test results) in order to be able to add information obtained subsequently from medical records or other sources during follow-up. This is done using a carefully controlled and anonymised codes, which can be accessed by only a limited number of PHE staff solely for the purposes of such linkage. Computer security measures are in place to block unauthorised access (for example, by "hackers") to the study computers and databases that hold personal information.

Data or samples provided to researchers outside MyMelanoma or PHE will not include any personal identifiers. Moreover, such researchers must confirm that they will not make any attempt to identify individual participants or to contact them directly. MyMelanoma and PHE staff also sign confidentiality agreements as part of their job contracts, and are trained in the appropriate handling of personal data.

If I decide that I want to take part what do I do next?

- Click the CONSENT button. (If you are reading a paper version information sheet log-in to MyMelanoma and click this button).
- The system includes checks that ensure you remain happy with the specific things you are

agreeing to.

- Then you would tick each box indicating you agree with the corresponding statement add your initials. Please note: there are some boxes which must be ticked for participation as discussed above. ~~That is that~~ the consenting process will stop if there is no agreement to storage of data by Public Health England and passive medical follow up.
- Having consented, then the system will require you to set up a new login using your study number and password, just as one does in order to log into websites generally.
- After consent is obtained then the initial questionnaire will pop up as a task to be completed on your MyMelanoma "page". This can be completed immediately or later if preferred. If the research team see that it has not been completed within 6 weeks however, then they will send you a reminder by your preferred method of contact.

Who will use my information?

Information and samples from MyMelanoma participants will be available only to researchers who have relevant scientific and ethics approvals for their planned research. This may include researchers who are working in other countries and in commercial companies such as pharmaceutical companies looking for new treatments. MyMelanoma understands that we will make progress faster if academic centres, patients and commercial enterprises work together.

The data provided will be primarily used to address the aims described above, all of which relate to melanoma. Some of the data however would potentially be of value to other aspects of care for melanoma patients and also of additional health issues such as other types of cancer. The resource would therefore be available to such researchers if the access committee view the request as valid.

Results from any tests made on participants or their samples will eventually be put in the MyMelanoma database so that they are available to all approved researchers. The samples will usually not be processed very quickly: they will be stored and then processed in batches. This delay is deliberate as test results vary according to when they are run and keeping samples (once they have been stabilised) reduces the error rate. This information will be made available as soon as the data quality is confirmed and enough participants have taken part. It is anticipated with this will be in distinct stages so that we might be able to make available participant reported information on the impact a diagnosis of melanoma had on their life, in the short term, possibly within a year. But that large scale processing of samples may take a period of years. This has been true of UKBiobank, but the investment in time has clearly been important as the information stored by UKBiobank is now being used all over the world a number of years after the project began. We hope that a significant proportion of the data will be of value to researchers looking at human responses to other cancers.

There will be a requirement to publish the results of all research based on the resource so that people can benefit from it.

Insurance companies and employers will not be given any individual's information, samples or test results, and nor will we allow access to the police, security services, relatives or lawyers, unless forced to do so by the courts.

Will I get results from any tests performed on samples I might later donate?

The results of any tests performed on samples will not be returned to you for a number of reasons listed below. This is a decision made by the MyMelanoma team as was made previously by UKBiobank. We find this a difficult issue as we very much believe in transparency, and we therefore undertake to keep this question under review

- The principle reason is that because the tests are being performed for research the significance for melanoma patients of test results will not be clear until after the end of the study.
- Due to the scope and size of the study it would not be feasible to feed back results with the necessary support for participants. There are research groups carrying out projects with the intension of devising mechanisms to address this issue and we undertake to utilise these systems if it is possible at a later stage.

Where will the results of the research be published?

The results of the studies will be published in scientific journals which are "open access" meaning that the journals do not require payment for access to the papers.

Summaries of these papers using any data collected including those derived using the UK Biobank resource will be made available to participants and anyone else who might be interested, at www.mymelanoma.org. The summaries will be written in as accessible language as possible.

As is usual, new results will be presented by researchers at conferences internationally, and the MyMelanoma team will support online videos of these where possible using the MyMelanoma YouTube site. We will seek to present data at conferences attended by participants and melanoma patients/ survivors such as the UK Melanoma Patient Conference.

What happens if I change my mind in the future?

Potential participants are asked to discuss any concerns that they might have with a member of the project team before agreeing to participate. It is better not to take part rather than to feel unhappy about it later.

You can opt out of the research at any point. There is a formal process for requesting opt-out which will be detailed on the MyMelanoma webpage. Opt-out statues include:

"No further contact": This means that MyMelanoma would no longer contact you directly, but would still have your permission to retain and use information and any samples provided previously and to obtain and use further information from your health records.

"No further access": This means that MyMelanoma would no longer contact you or obtain further information from your health records in the future, but would still have your permission to use the information and samples provided previously.

"No further use": This means that, in addition to no longer contacting you or obtaining further information about you, any information and samples collected previously would no longer be available to researchers. MyMelanoma would destroy your samples (although it may not be

possible to trace all distributed sample remnants) and would only hold your information for archival audit purposes. Your signed consent and withdrawal would be kept as a record of your wishes. Such a withdrawal would prevent information about you from contributing to further analyses, but it would not be possible to remove your data from analyses that had already been done.

We will act on your opt-out request, in line with the above options, and will keep a record of it, so that we can comply with legislative requirements under GDPR.

What happens if something goes wrong?

The risks of participants suffering harm as a result of taking part are minimal, but MyMelanoma has insurance in place to provide compensation for any negligent harm caused by participation in the MyMelanoma Cohort Study Pilot, via the University of Leeds.