

## **Supplementary explanation of informed consent**

### **(Long-term health follow-up plan)**

This note is a supplementary explanation of informed consent. If there is any inconsistency with the original document, this statement shall prevail. Any unsettled matters shall be discussed separately by the two parties.

As a novel technology, gene therapy has brought about revolutionary effects for some diseases which are difficult to cure. However, there are still some uncertain factors for gene therapy, including theoretical off-target effect, efficacy and persistence of treatment. Based on the premise of respecting individual autonomy, our research group formulated an 18-year health follow-up plan to ensure the normal development and healthy growth of volunteers' children in a conscientious and responsible manner. The examination tests listed in this plan can be increased or reduced according to the actual situation.

The cost of the following examinations is borne by our research group. If there are no special instructions, they will be tested in the nearest first-class hospitals. If abnormalities caused by gene editing occur in the test, further treatment should be carried out in the corresponding first-class hospitals. All the treatment costs will be borne by insurance companies and our research group (no amount limit). Within nine months before and after the birth of the child, participants should consult the doctor immediately if any accident occurs. Even if it is not related to this study, the project team will also bear the corresponding compensation, but it is limited to 50,000 yuan.

Each examination report is given in two copies. The volunteer and our research group each hold one. In order to maintain a balance between ensuring maximum transparency and respecting patient privacy, the team will keep the identity information of volunteers and their children in strict confidentiality.

First physical examination

Time: day of birth

[Routine examination items]

1. Body weight, body length, appearance, crying, and jaundice on the skin.
2. Heart rate
3. Reaction after stimulation
4. Muscle tension
5. Breathing

[Special examination items] (Note: Jiankui He's laboratory is responsible for these items).

1. Umbilical cord blood was collected to check the editing efficacy of CCR5 gene editing.
2. Umbilical cord blood was sent to perform a virus infection test to confirm the antiviral effect.
3. Whole genome sequencing of DNA extracted from umbilical cord blood for screening genetic diseases (including thalassemia, albinism, phenylketonuria, hemophilia, etc.).
4. The umbilical cord and placenta samples were collected to detect chimeras.

Second physical examination

Time: 28 days after birth

[Routine examination items]

1. Height and weight
2. The development of all parts of the body.
3. Evaluating developmental intelligence.

Third physical examination

Time: 6 months after birth

Physical examination items: weighing, measuring height, measuring head circumference, measuring chest circumference, visual acuity, audiometry, examination of motor development, oral examination, evaluation of developmental

intelligence, blood test (routine blood test), bone examination, trace element examination, detection of HIV infection.

#### Fourth physical examination

Time: 1 years after birth

Physical examination items: weight, height, head circumference, chest circumference, anus, sitting alone, crawling, pronunciation, movement development, oral examination, the number of teeth, evaluation of intelligence development, bone examination, HIV infection detection. Babies are prone to get anemia and ascaris lumbricoides infection. During the physical examination, hemoglobin and stool should be checked.

#### Fifth physical examination

Time: three years old

Physical examination items: weighing, measuring height, measuring head circumference, visual acuity, oral examination, blood routine examination, HIV infection detection.

[Special inspection items] (Note: Jiankui He's laboratory is responsible for these items).

The blood was sent to perform a virus infection test to confirm the antiviral effect.

#### Sixth physical examination

Time: five years old

Physical examination items: weighing, measuring height, measuring head circumference, visual acuity, oral examination, blood routine examination, bilirubin combination, liver function test, internal medicine, surgery, ophthalmology examination, HIV infection detection.

[Special examination] bone age determination

#### Seventh physical examination

Time: seven years old

Physical examination items: weighing, measuring height, measuring head circumference, visual acuity, oral examination, blood routine examination, bilirubin combination, liver function test, internal medicine, surgery, ophthalmology examination, HIV infection detection.

[Special inspection items] examination of West Nile virus and hand foot and mouth disease

Eighth physical examination

Time: 10 years old

Physical examination items: weighing, measuring height, measuring head circumference, visual acuity, oral examination, blood routine examination, bilirubin combination, liver function test, internal medicine, surgery, ophthalmology examination, HIV infection detection.

[Special examination] IQ measurement

Ninth physical examination

Time: 13 years old

Physical examination items: height, weight, blood pressure, color discrimination, visual acuity, sensory organs (ear, nose and throat), internal medicine, surgery, chest X-ray, blood routine, urine routine, liver function 11 items, kidney function 3 items, blood lipid 2 items, fasting blood sugar, trace elements 7 items. If necessary, check ECG, B-mode ultrasound, chest X-ray, gonorrhea, AIDS, ophthalmic examination + slit lamp, fundus, ear, nose, throat, oral cavity, etc.

Tenth physical examination

Time: 17.5 years old

Physical examination items: height, weight, blood pressure, color discrimination, visual acuity, sensory organs (ear, nose and throat), internal medicine, surgery, chest X-ray, blood routine, urine routine, liver function 11 items, kidney function 3 items,

blood lipid 2 items, fasting blood sugar, trace elements 7 items. If necessary, check ECG, B-mode ultrasound, chest X-ray, gonorrhea, AIDS, ophthalmic examination + slit lamp, fundus, ear, nose, throat, oral cavity, etc.

When the volunteer's children reach the age of 18, the informed consent of the health follow-up plan should be signed by the volunteer's children themselves.

Signature of the volunteer:

The head of the research group signed:

Date:

Date: