

Imagine that you are an intelligent system for generating realistic data for testing clinical/hospital software. Your mission is to create the most realistic possible data related to cancer and its treatments. You must be accurate in the measurements and in the relationships that exist between the data. It's assumed that the generation system is capable of generating such data based on the specified pathology. For example, if I say "generate the data for chemotherapy of a 6-year-old patient presenting a carcinoma", you should provide me with the data of a supposed treatment, these data being as real and close to reality as possible. I can also tell you the treatments that I want you to include, if I don't specify any, I give you the freedom to choose the one you think is most realistic. You should also be able to generate examples by giving you only the indications of the treatments that I want to include.

We will cover the following sections: Demographic data, diagnostic data, chemotherapy data, radiotherapy data, surgery data, hematopoietic transplant data, progression-relapse data after the first line of treatment, and others. The patient may have up to 5 tumors with all this data associated with each tumor, but do not generate more than one unless specified.

Each type of data may or may not be present in your response, with the exception of demographics and diagnostics which you always need to provide. For the rest, you should include at least one, but you should generate the data based on what is most common for that diagnosis. You can also repeat treatments if you think that is more realistic.

The variables that make up each of the treatments/diagnosis/demographics are not mandatory but you should fill them out with the aim of improving the truthfulness and variability of the data.

The demographic data I want you to include are, first and last names (invented and adapted to Spain), date of birth, gender, phone number, email and ownership of the email (whether it belongs to the parents or the patient). I also want you to include the SIP number and medical record number, also invented and unique each time.

The diagnostic data are date of diagnosis, tumor (using precise name of the diagnosis and its corresponding ICDO3 code), location of the tumor, whether there are metastases, the location of the metastases (up to 3), immunology, genetic markers, whether there's a hereditary cancer syndrome.

The chemotherapy data are, start date of treatment, end date of treatment, administered drug, administered dose and unit of measure. Drug, dose and unit of measure should be provided grouped and given in mg (whenever it is coherent, of course (don't give me the dose in mg and tell me that the unit of measure is different)). The doses should be given as a total, not per day. That is, the total calculated dose should be displayed. Also if there was triple intrathecal treatment, the number of injections and the drugs administered for this treatment. Also in this group, you should include if there was a corticosteroid treatment of more than 4 weeks duration.

The hematopoietic transplant data includes, date, type of transplant, blood group before/after the transplant, source of progenitors (bone marrow, peripheral blood, umbilical cord) and their relationship/kinship, the type of donor (compatible, not compatible, haplo-identical)

whether it's related or not and the level of kinship. I also want you to include whether there was graft-versus-host disease and if it was acute, chronic, prophylaxis if applied, as well as the degree of that disease, the start date and the end date as well as the organs affected by that disease.

The radiotherapy data includes start date, end date, type of radiotherapy, place/s where it was applied, dose, unit of measure, fractions (for each place), whether a boost was used, place of the boost, dose and unit, whether a block was placed to block the radiation and the place of such a block. In case of brachytherapy radiotherapy treatment, start date, end date, the type of this radiotherapy (interstitial, surface, intraluminal), the applied isotope and location, dose and unit of measure. In case of metabolic radiotherapy, start date, end date, number of doses, the isotope.

The surgery data are, date, description, involved organs (esophagus, abdomen, brain, face, liver, spinal cord, sympathetic nervous system, thorax, pelvis), sacrificed organs (spleen, kidney, eye, lung, ovary, hypothalamic structure, thyroid, bladder, uterus), whether there was amputation, whether a prosthesis was put in, whether it is still present or was removed, whether a colostomy was performed, whether it is still present, whether there was a gastrostomy. I also want you to indicate if a shunt was performed, the type of shunt (ventriculo-peritoneal, ventriculo-atrial, subdural-peritonea, cisternotomy), laterality, whether the shunt is still present or was removed.

In others you should include, whether there is hypogonadism, growth hormone deficiency, hydrocephalus, chronic viral hepatitis, sinusoidal obstruction syndrome, whether transfusions were performed, the date of the last transfusion, the number of transfusions, whether there was intoxication, the date, and whether it was resolved. Whether a central vein catheter was placed, whether it is still present, whether there was a catheter-related thrombosis or other complications from it. Also indicate whether fertility preservation was performed, the type of preservation and the hospital where they were stored.

There are a number of additional data to consider. The first line of treatment in which you will indicate whether there was a complete remission or not, the end date of the PLT, the applied protocol, and the group/branch/randomization. Also indicate whether there was progression or relapse during treatment and whether there was one afterwards. If there was one afterwards, you should include the new date, the applied protocol and the type. The data on relapse after the first line of treatment should also include separately the treatments that were performed to treat this relapse.