

# Laboratory parameters in the elderly

<b>Submission date</b>	<b>Recruitment status</b>	<input type="checkbox"/> Prospectively registered
23/05/2015	No longer recruiting	<input checked="" type="checkbox"/> Protocol
<b>Registration date</b>	<b>Overall study status</b>	<input type="checkbox"/> Statistical analysis plan
27/05/2015	Completed	<input checked="" type="checkbox"/> Results
<b>Last Edited</b>	<b>Condition category</b>	<input type="checkbox"/> Individual participant data
18/05/2023	Other	

## Plain English summary of protocol

### Background and study aims

Laboratory tests are essential to diagnose issues and make treatment decisions. Interpretation of individual results relies on accurate reference intervals and decision limits. A lot of resources are spent on elderly patients but we know very little about accurate reference intervals. The SENIORLAB study aims to address this gap of knowledge by investigating a large variety of laboratory parameters in clinical chemistry, haematology and immunology.

### Who can participate?

Senior individuals aged 60 or above, residing in Switzerland and describing themselves as healthy.

### What does the study involve?

This is an observational study which involves a visit to the study centre. There will be basic measurements (blood pressure, weight and height) and a fasting blood test. Then participants will be periodically contacted every 3 to 5 years to evaluate their health status.

### What are the possible benefits and risks of participating?

Participants receive a selection of results from laboratory tests relevant for healthy seniors (such as glucose, HbA1c, and creatinine). The risk of participation can be considered to be very low and relates to the risk of phlebotomy of a peripheral vein, usually in the cubital region.

### Where is the study run from?

Labormedizinisches Zentrum Dr. Risch in Liebefeld (Switzerland)

### When is the study starting and how long is it expected to run for?

January 2007 to December 2025

### Who is funding the study?

INOVA Foundation (Liechtenstein)

### Who is the main contact?

1. Dr Martin Risch (martin.risch@ksgr.ch)
2. Dr Lorenz Risch (lorenz.risch@risch.ch)

# Contact information

## Type(s)

Scientific

## Contact name

Dr Martin Risch

## Contact details

Kantonsspital Graubünden

Zentrallabor

Loësstrasse 170

Chur

Switzerland

7000

## Type(s)

Public

## Contact name

Dr Lorenz Risch

## ORCID ID

<https://orcid.org/0000-0003-2692-6699>

## Contact details

Labormedizinisches Zentrum Dr. Risch

Waldeggstrasse 37

Liebefeld

Switzerland

3097

# Additional identifiers

## Protocol serial number

N/A

# Study information

## Scientific Title

SENIORLAB: a prospective observational study investigating laboratory parameters and their reference intervals in the elderly

## Acronym

SENIORLAB

## Study objectives

In clinical practice, laboratory results are very often important when it comes to make diagnostic, therapeutic and prognostic decisions. Interpretation of individual results relies on

accurate reference intervals and decision limits. Despite a considerable amount of resources in clinical medicine spent on elderly patients, accurate reference intervals for the elderly are only rarely available. The SENIORLAB study was set out to address this gap of knowledge determining reference intervals in the elderly by investigating a large variety of laboratory parameters in clinical chemistry, hematology, and immunology.

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

Ethics Committee Bern (Kantonale Ethikkommission Bern; KEK), 05/01/2009 & 29/07/2013 (amendment), ref: 166/08

## **Study design**

Single-center observational trial

## **Primary study design**

Observational

## **Study type(s)**

Quality of life

## **Health condition(s) or problem(s) studied**

Subjectively healthy elderly persons aged 60 and over

## **Interventions**

An extensive baseline evaluation is undertaken in the study participants. The participants are followed up for quality of life, morbidity and mortality.

## **Intervention Type**

Other

## **Primary outcome(s)**

Evaluation of robust reference intervals

## **Key secondary outcome(s)**

1. Associations between different parameters
2. Diagnostic characteristics of parameters to diagnose different circumstances
3. Prevalence of occult disease in subjectively healthy individuals
4. Risk factors for outcomes

## **Completion date**

31/12/2025

## **Eligibility**

### **Key inclusion criteria**

1. Aged 60 or older
2. Resident in Switzerland
3. Subjective perception of being healthy
4. Fasting state when going for baseline examination

**Participant type(s)**

Healthy volunteer

**Healthy volunteers allowed**

No

**Age group**

Senior

**Sex**

All

**Key exclusion criteria**

1. Known diabetes mellitus
2. Known thyroid disease
3. Current glucocorticoid use
4. Active neoplastic disease during the past 5 years
5. Consumption of more than 5 pharmacologically active substances (polypharmacy)
6. Hospitalisation during the past 4 weeks

**Date of first enrolment**

28/05/2009

**Date of final enrolment**

31/12/2011

## Locations

**Countries of recruitment**

Switzerland

**Study participating centre**

**Labormedizinisches Zentrum Dr. Risch**  
Waldeggstrasse 37  
Liebefeld  
Switzerland  
3097

## Sponsor information

**Organisation**  
Labormedizinisches Zentrum Dr. Risch

**ROR**  
<https://ror.org/030f5x630>

## Funder(s)

**Funder type**  
Research organisation

**Funder Name**  
INOVA Research Foundation (Forschungs- und Förderstiftung INOVA) Principality of Liechtenstein

## Results and Publications

### Individual participant data (IPD) sharing plan

#### IPD sharing plan summary

Other

#### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	15/05/2018		Yes	No
<a href="#">Results article</a>	8 year follow up	17/05/2023	18/05/2023	Yes	No
<a href="#">Protocol article</a>	protocol	01/01/2017		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes