European Autoimmunity Standardisation Initiative

Evaluation of autoimmundiagnostics in Austria using the Dutch Autoimmune Questionaire

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Questionnaire

- ✓ Organisation n= 4
- ✓ ANA testing n=14
- ✓ Anti-dsDNA ab testing n= 8
- ✓ Anti-ENA ab testing n=15
- ✓ ANA/ENA algorithm n=16

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Response

Send to 407 persons (lab stuff)

✓ 72 responses (17,7%)

✓ 37 AI, 35 non-AI laboratories

estimated labs AI labs 51

questionnaires returned 37 (72%)

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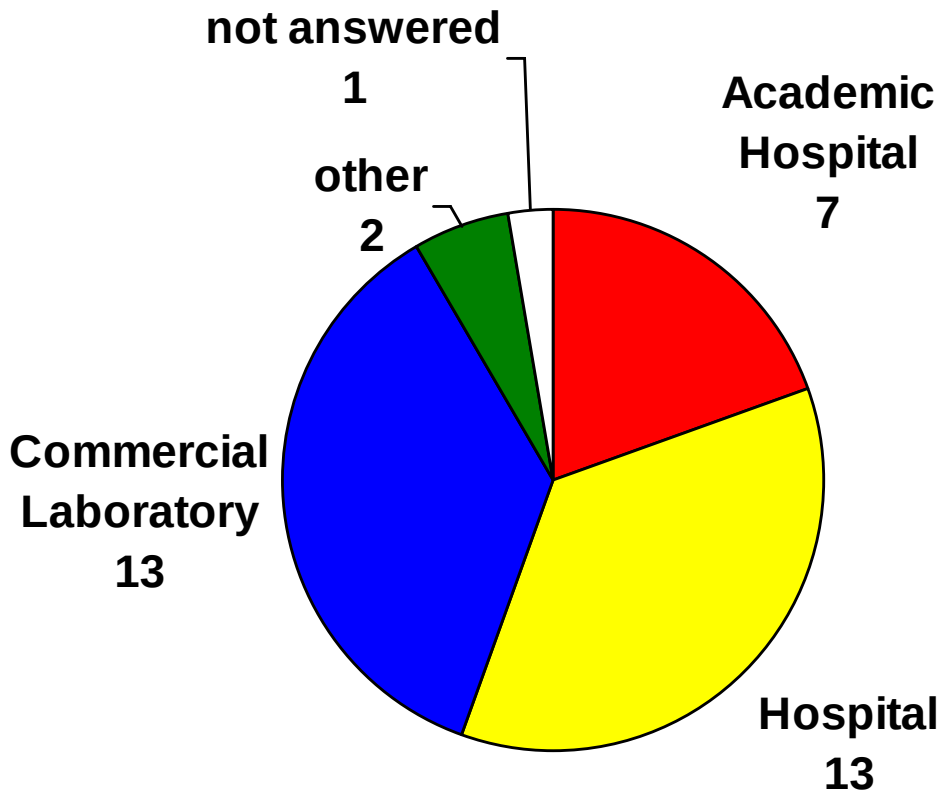
Organisation



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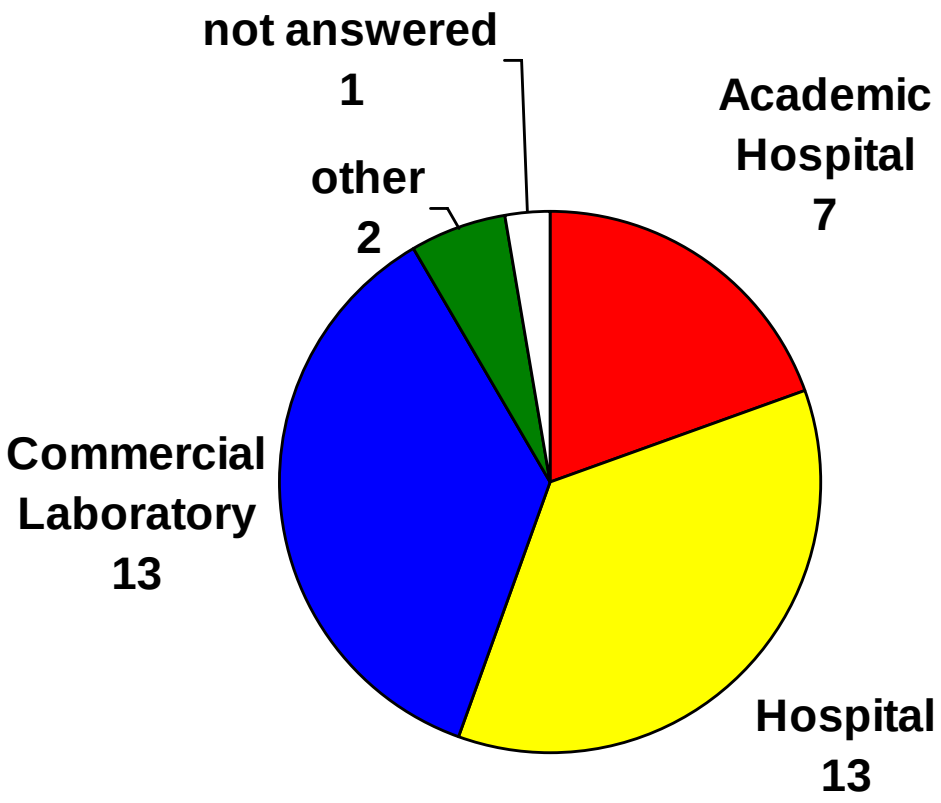
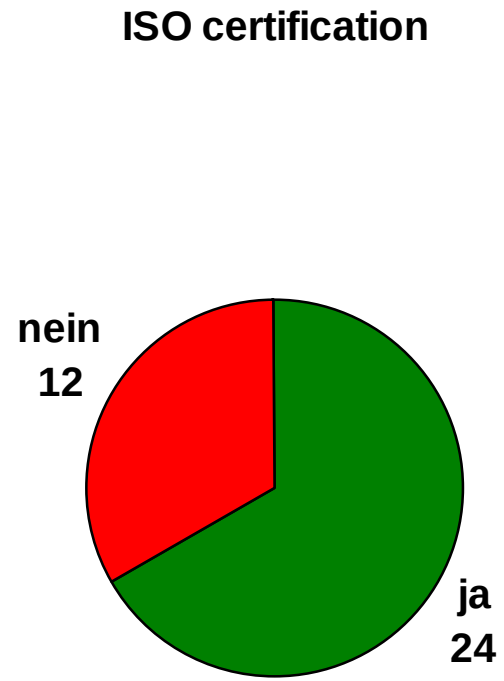
Organisation





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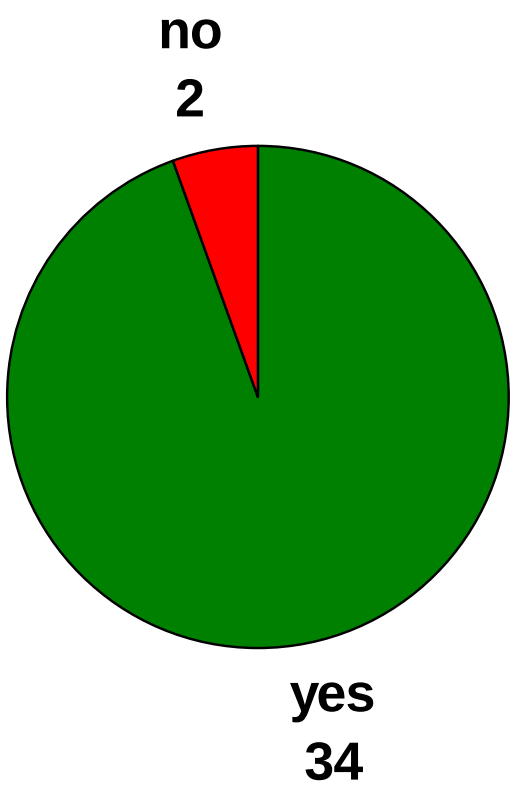
ANA testing

ANA Screening with iIF



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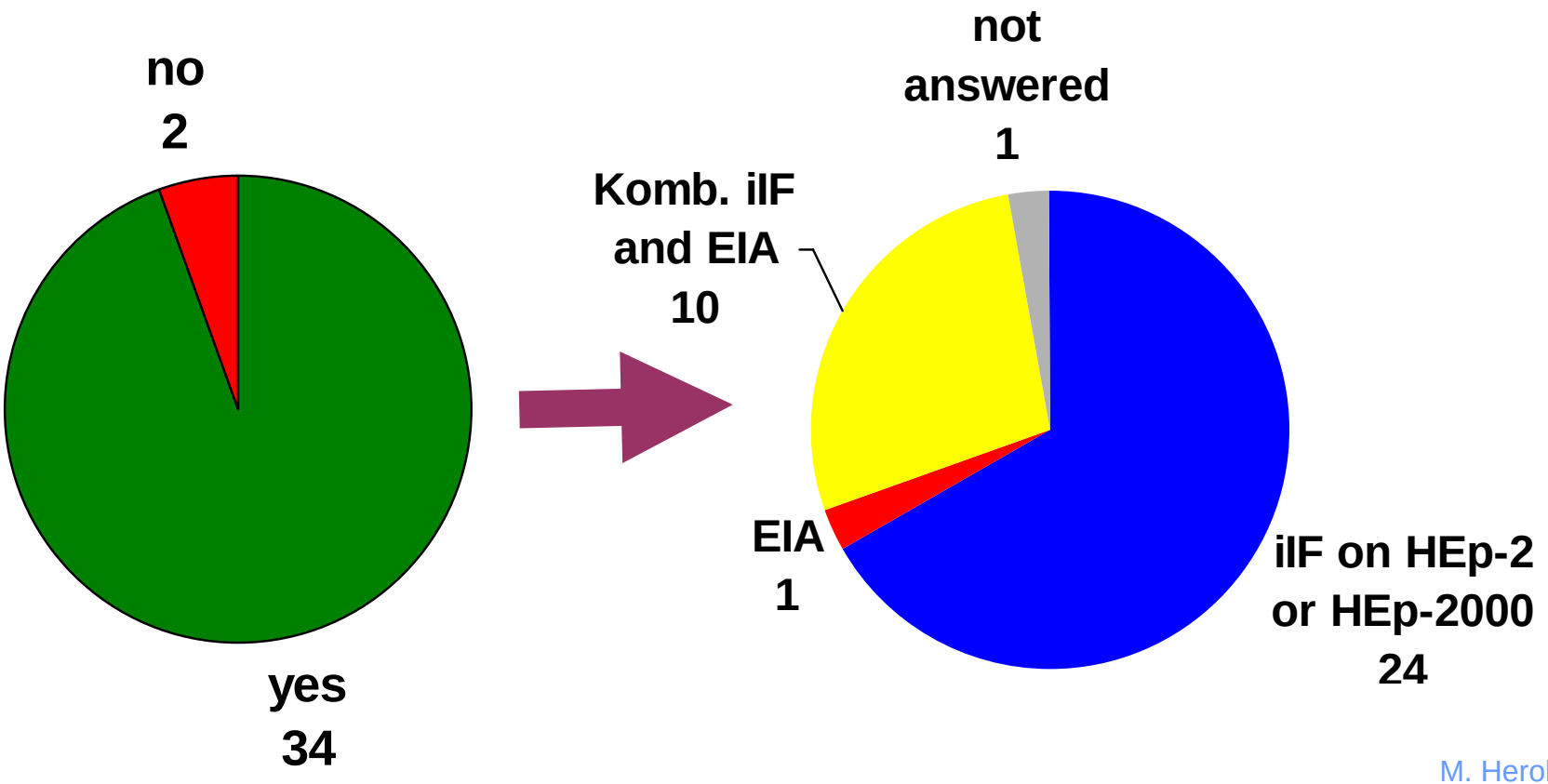
ANA testing

ANA Screening with iIF



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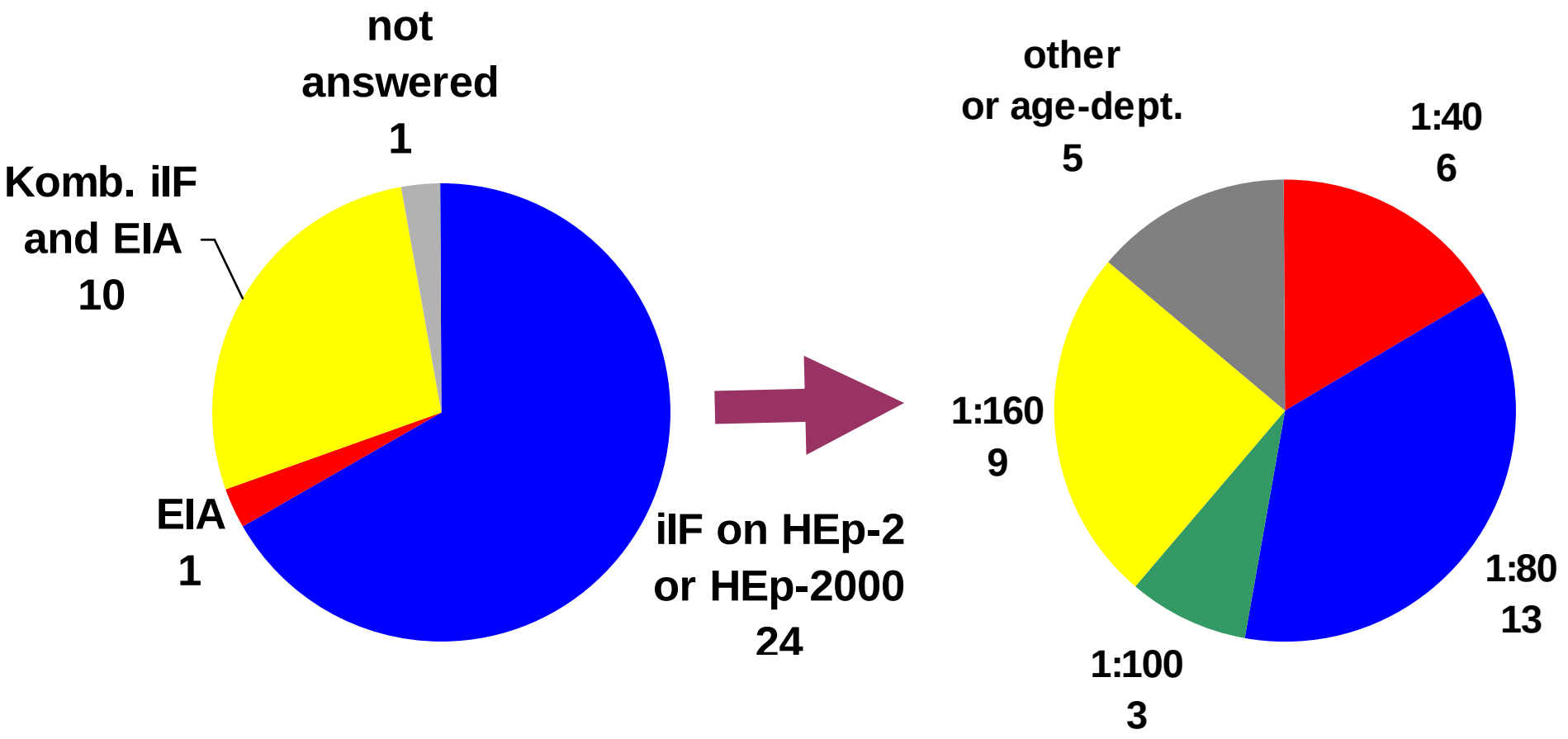
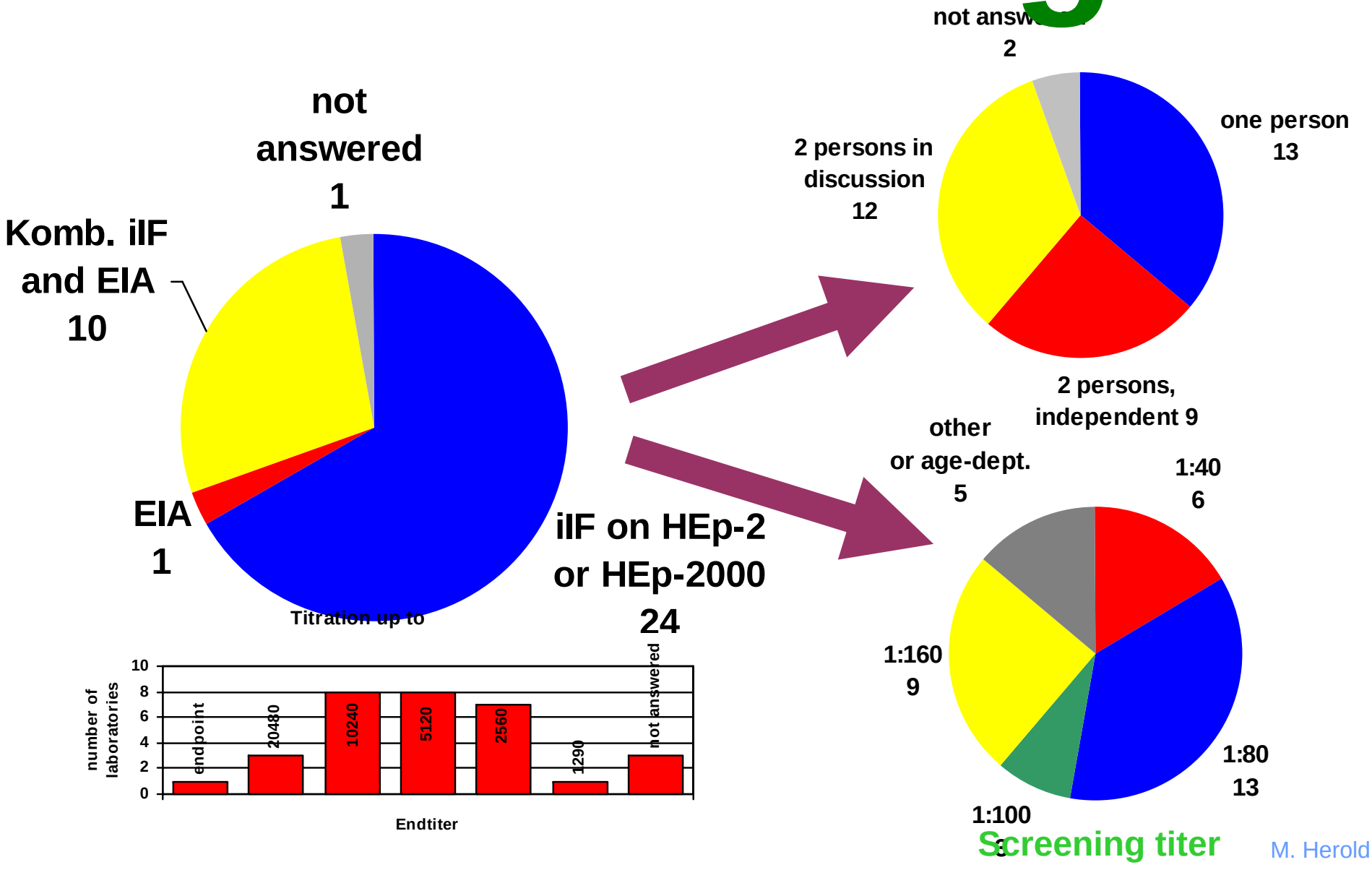
ANA method & screening titre



ANA reading



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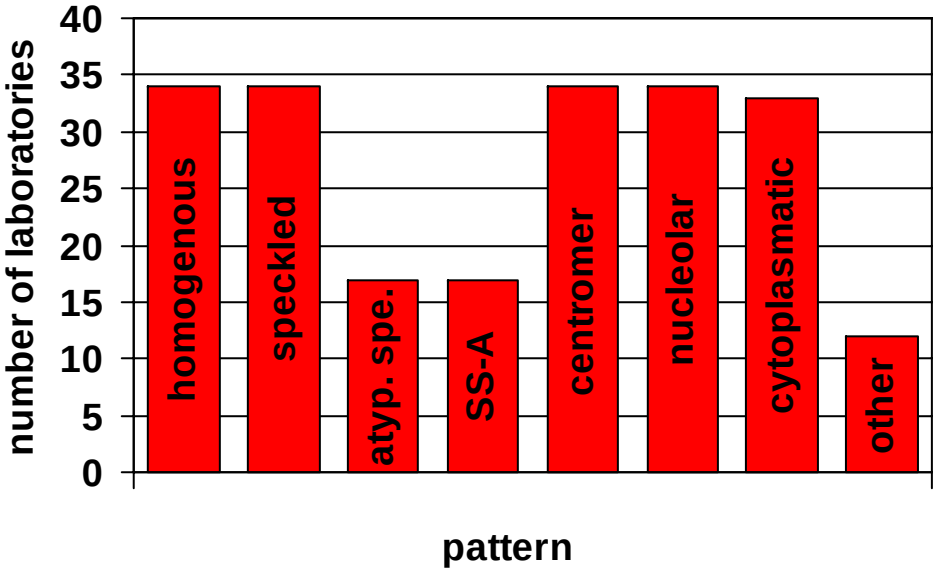
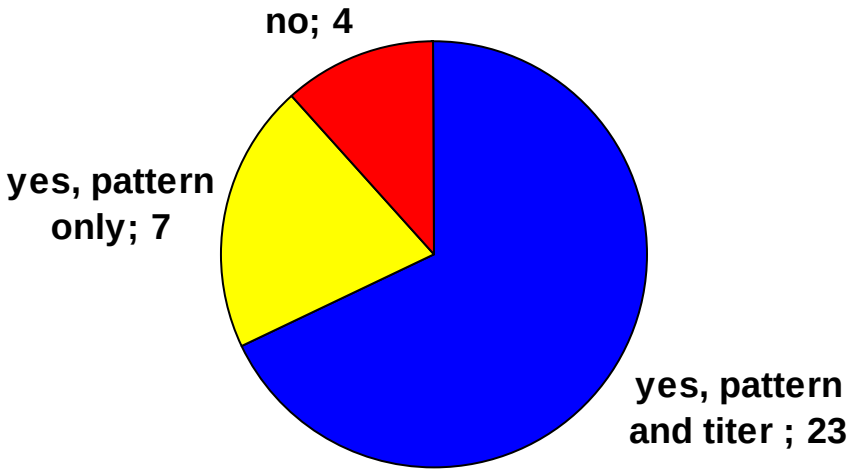
ANA patterns reported

Report of multiple patterns





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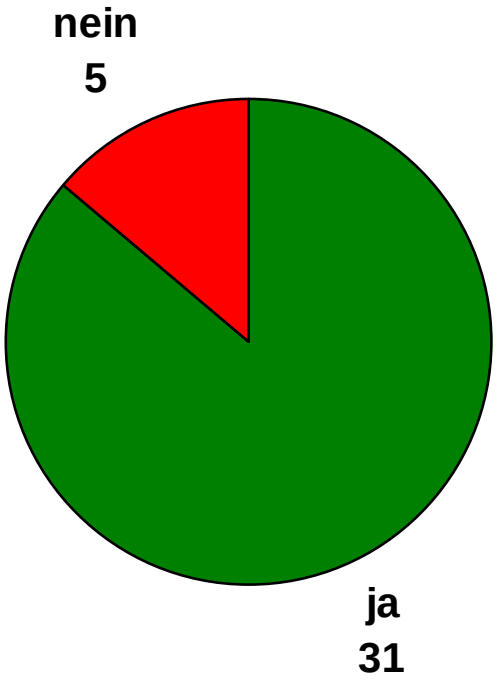
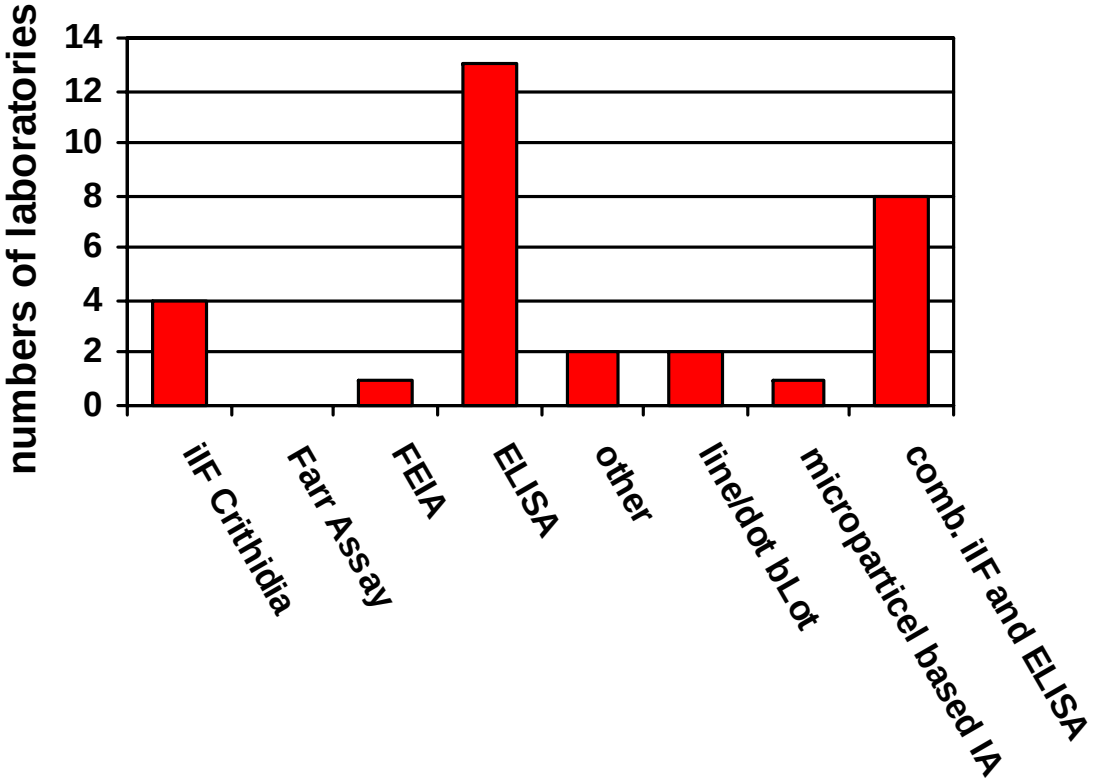
dsDNA ab reported

anti ds-DNA performed



ds DNA methods



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ANA & anti dsDNA

- ✓ 3 labs consider ANA a screening assay for anti-dsDNA ab
- ✓ 13 labs (38%) add ANA if anti-dsDNA ab is requested
- ✓ 7 labs (19%) do not perform anti-dsDNA ab test if ANA is negative
- ✓ 8 labs (22%) add anti-dsDNA ab if ANA is positive
- ✓ 8 labs (22%) add anti-dsDNA ab if ANA reveals a homogenous pattern
- ✓ In 14 labs (39%) there seems to be no algorithm for ANA in relation to anti-dsDNA ab.

ENA ab testing

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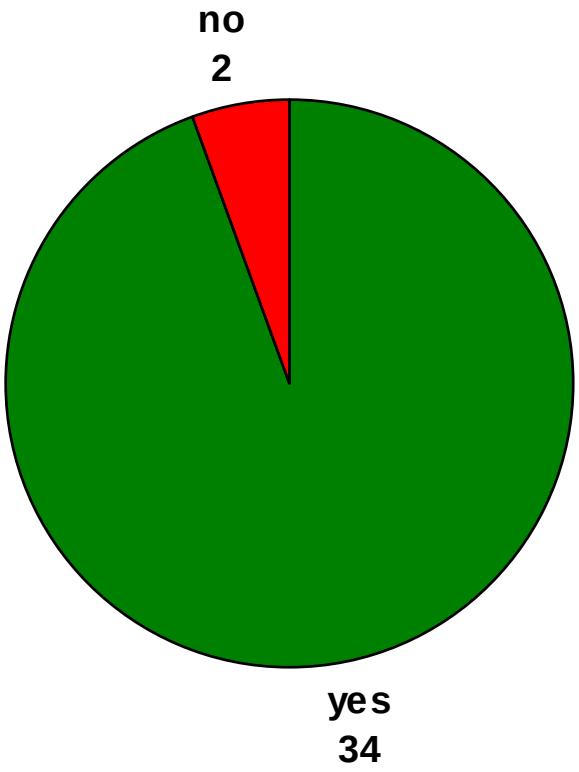
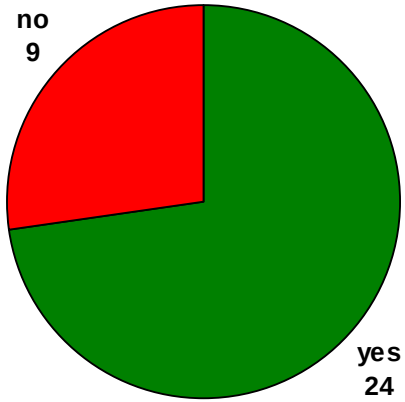
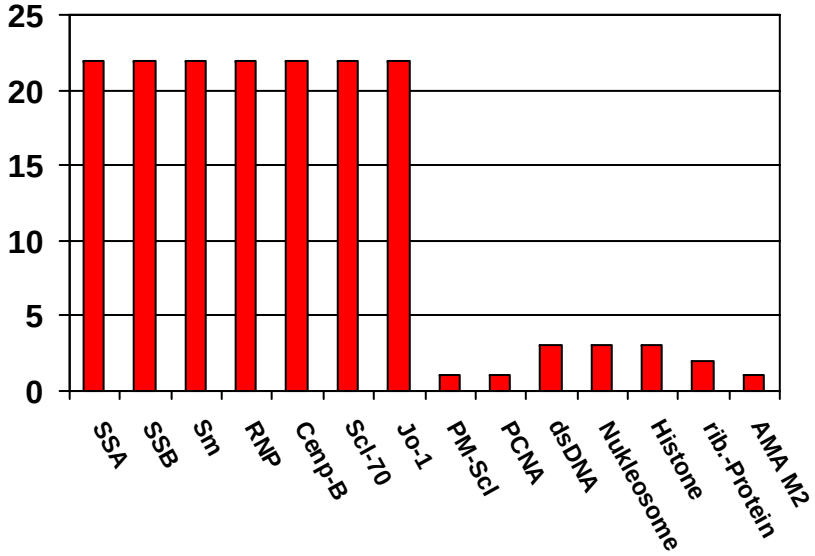
anti-ENA ab testing



anti-ENA screening test



antigens included in screening test



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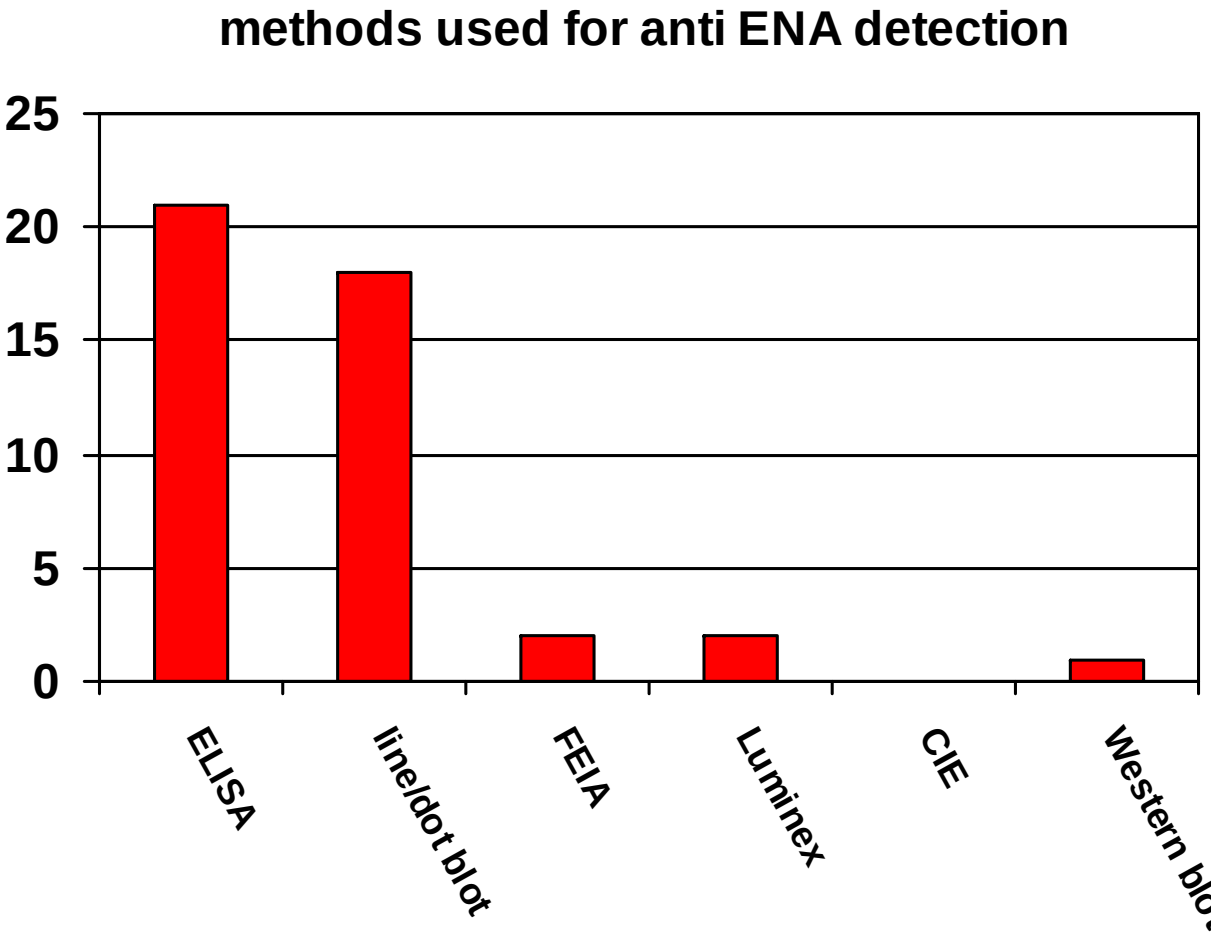
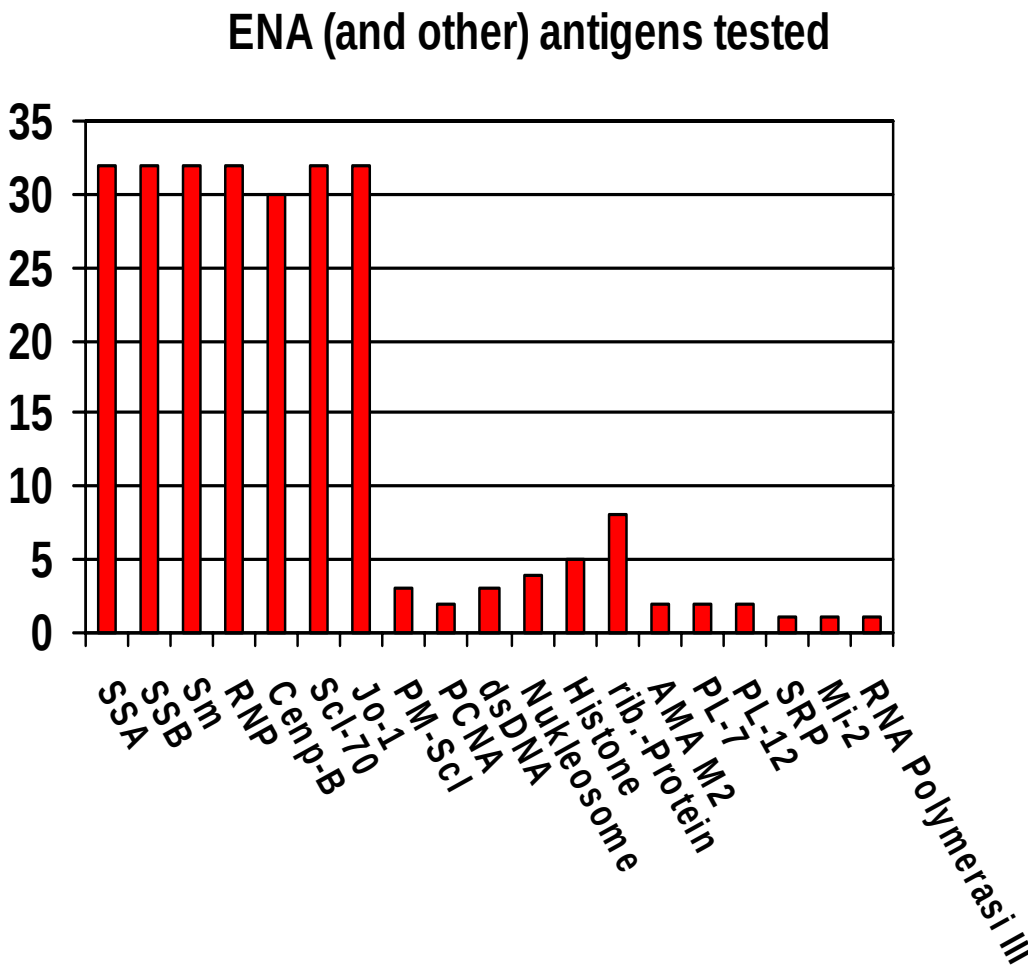
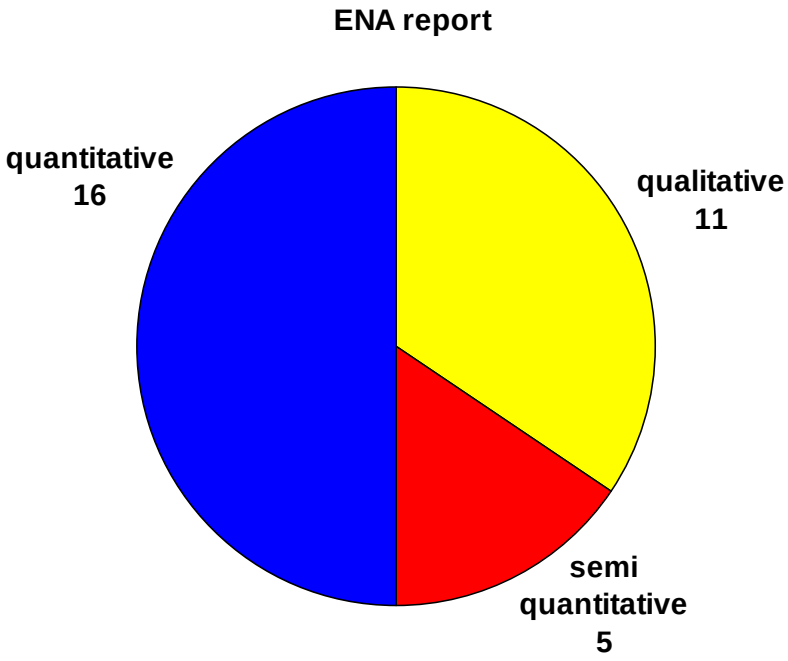
ENA ab methods



8 labs (24%) perform more than one method for ENA detection

ENA antigens

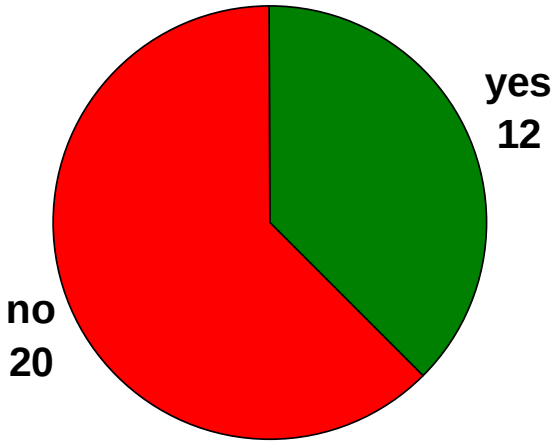




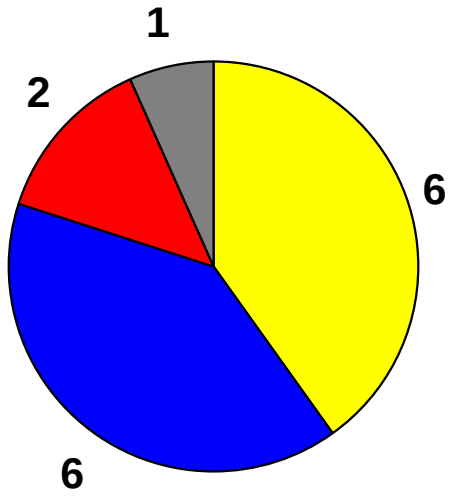
30 labs (94%) report all measured ENA incl. negatives

SSA/Ro 60 & 52 kD

distinction between SSA/Ro 60/52 kDa



Report of SSA 60/52 kDa



- 60 kDa or 52 kDa pos = SSA
- both reported separate
- 52 kDa only reported if 60 kDa neg
- other

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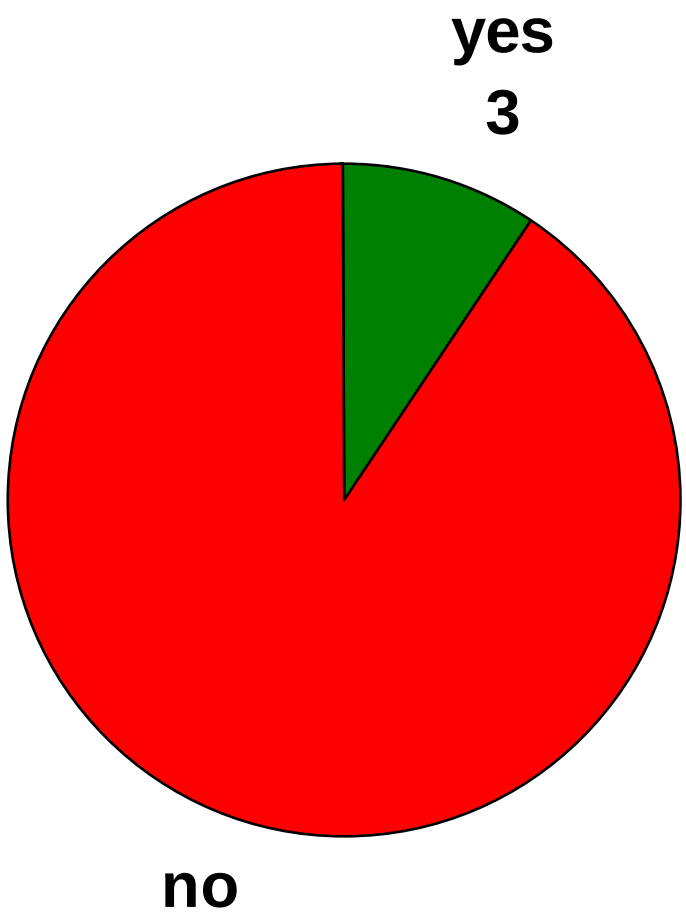
distinction between RNP-70, RNP-A and RNP-B(C)



distinction between Sm-B amd Sm D

ANA & anti-ENA ab

- ✓ 16 labs (46%) add ANA if anti-ENA ab is requested
- ✓ 10 labs (28%) do not perform anti-ENA ab test if ANA is negative
- ✓ 26 labs (72%) add anti-ENA ab if ANA is positive
- ✓ 11(42%) of these labs add anti-ENA ab only if ANA reveals a specific pattern and/or titer
- ✓ In 9 labs (25%) there seems to be no algorithm for ANA in relation to anti-ENA ab

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time till retesting

	Diagnosis	Follow-up
ANA	n=13 0,5-12 months median 3 months	n=9 0,5-12 months median 3 months
Anti-dsDNA ab	n=7 0,5-3 months median 3 months	n=5 0,5-3 months median 2 months
Anti-ENA ab	n=11 3-12 months median 3 months	n=10 1-12 months median 3 months

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Summary 1/2

1. iIf on HEp-2/2000 is still the standard method (94%) for ANA testing (n=36)
2. 1:80 is the most used screening titer (36%) for ANA
3. Almost all laboratories (94%) report the ANA pattern
4. EIA or related methods are frequently (87%) used for dsDNA ab detection. iIF on Crithidia luciliae is used by 31% labs. No lab is using Farr Assay,
5. most labs only perform “Standard ENA” SSA, SSB, Sm, RNP, CENP-B and Jo-1

Summary 2/2

6. The relation between ANA patterns and/or titers is only poorly translated into a diagnostic algorithm (n=7)
7. 60% of labs distinguish between SSA/Ro 60/52 kDa
8. RNP-70, RNP-A, RNP-C and SmB, SmD is infrequently distinguished (9%, 3%)