

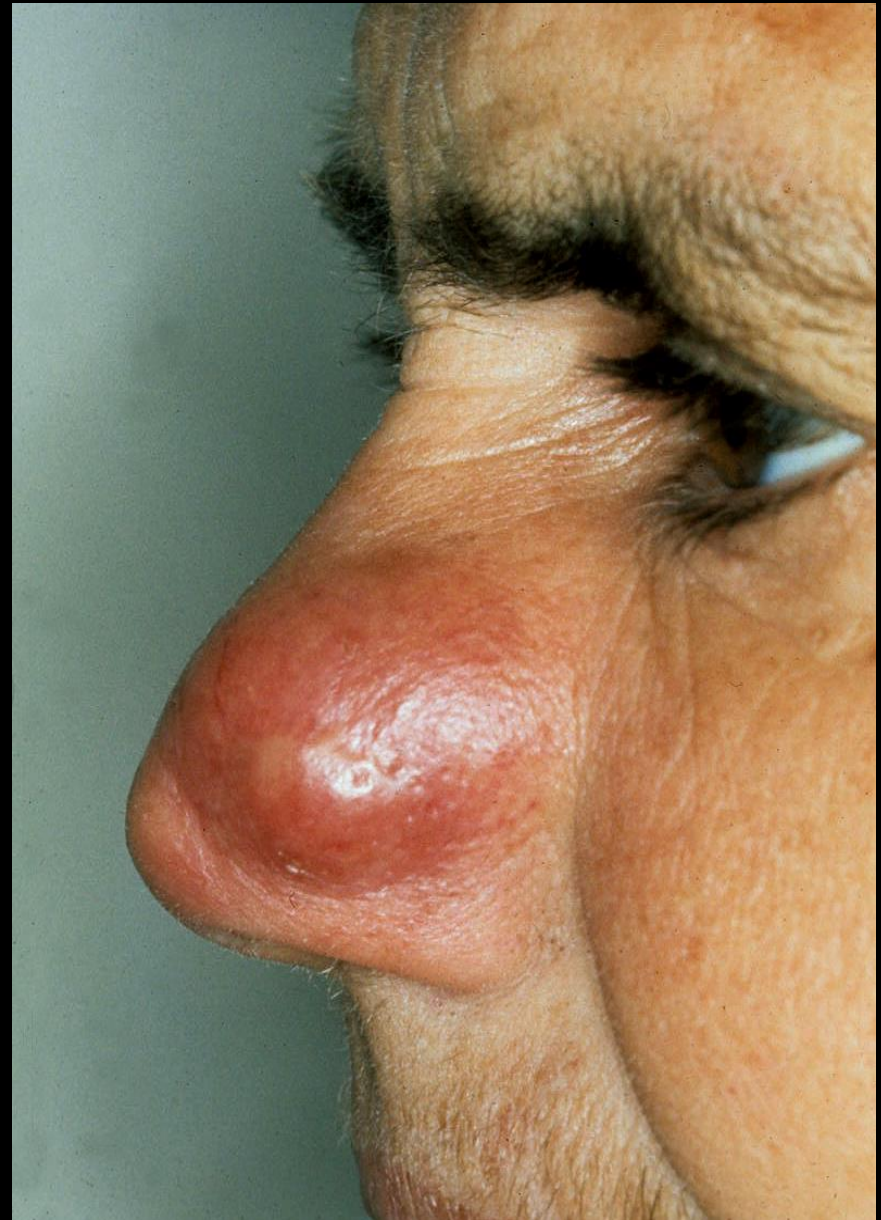
Interface of Sarcoma treatment to other disciplines: skin and gynecological sarcomas



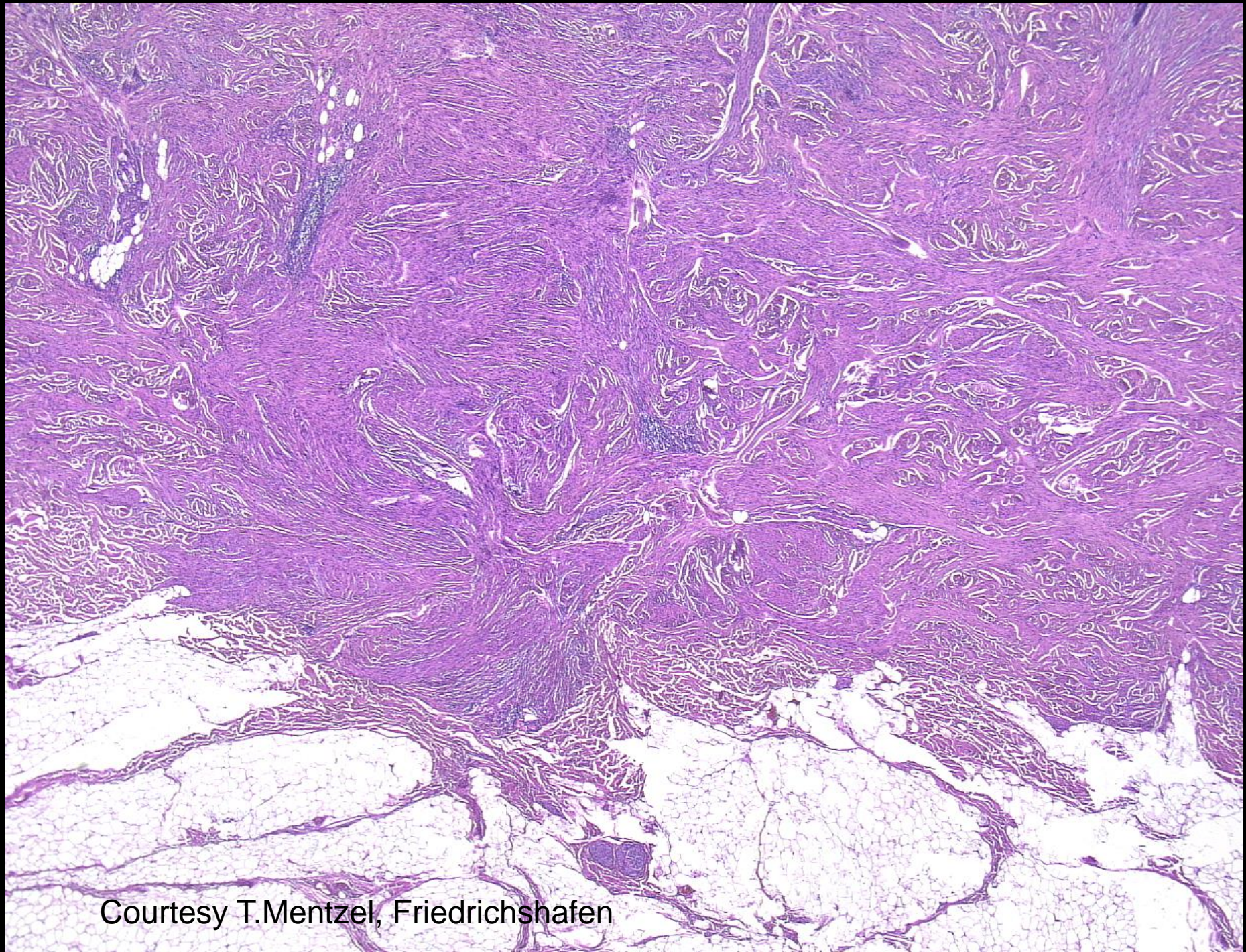
Skin and subcutaneous sarcomas at the interface

- **All sarcomas can also arise in the skin**
major interest:
- Dermatofibrosarcomas protuberans
- Angiosarcoma
- More general skin sarcomas

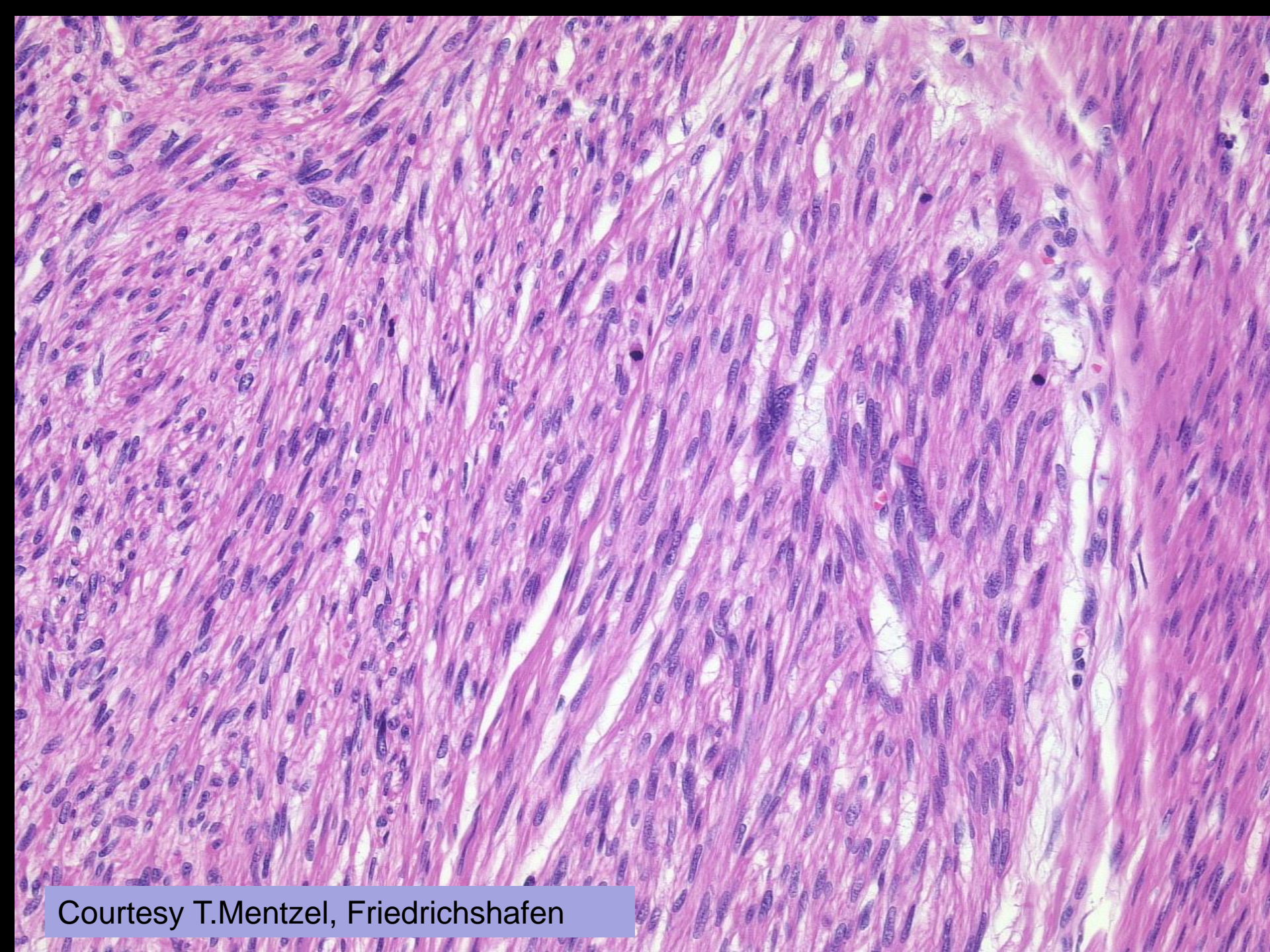
kutanes Leiomyosarkom



Courtesy T.Mentzel, Friedrichshafen



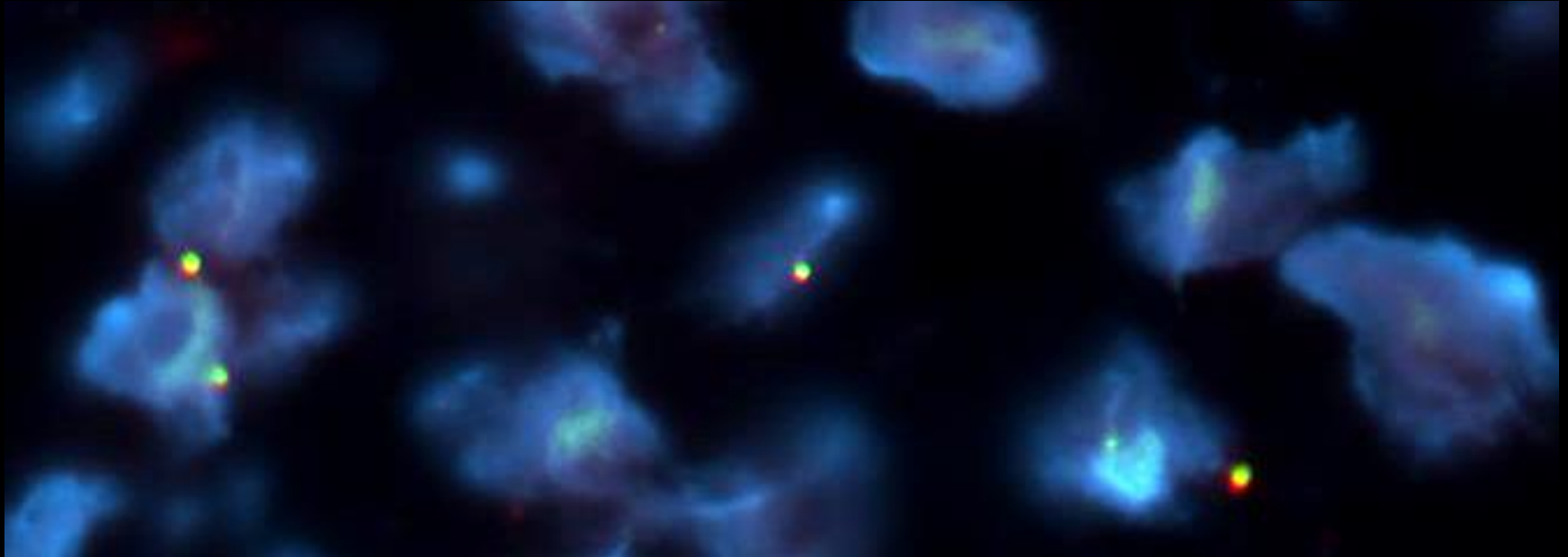
Courtesy T.Mentzel, Friedrichshafen



Courtesy T.Mentzel, Friedrichshafen

Dermatofibrosarcoma protuberans





FISH of 17;22 Translokation

Fusionssonden

grün BAC 93L18 (für Chromosom 22)

rot BAC 506F07 (für Chromosom 17)

Dermatofibrosarcoma protuberans



alveolar RMS



embryonal RMS



**Superficial
liposarcoma**



actinic angiosarcoma





Differenzierungsrichtungen bei Sarkomen

WHO-Klassifikation der Weichgewebstumoren 2013

- **adipozytär**
- fibroblastär/myofibroblastär
- fibrohistiozytär
- glattmuskulär
- perizytär
- skelettmuskulär
- vaskulär
- chondroossär
- unsichere Differenzierungsrichtung

WHO-Klassifikation der Hauttumoren 2006

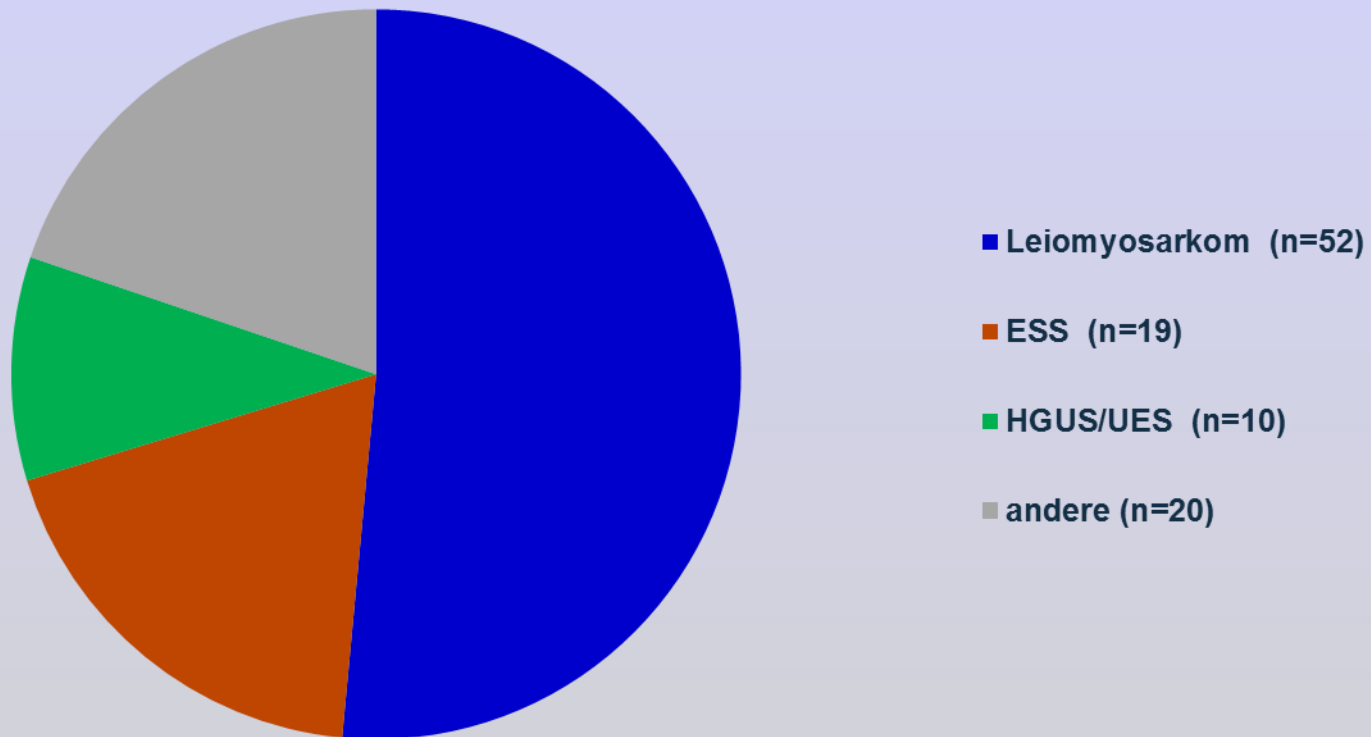
- **Fibroblastär/fibrohistiozytär/histiozytär**
- glattmuskulär/skelettmuskulär
- **vaskulär**
- lymphatisch

Skin and subcutaneous sarcomas

- Rare, extremely heterogenous
- clinico-pathological peculiarities
- Grading is of less importance
- **in general, better prognosis compared to STS (size?)**
- complete excision
- typically, no adjuvant therapy

Interface to gynecological cancer

**Patienten mit fortgeschrittenem uterinem Sarkom,
2004-18 (n=101)**

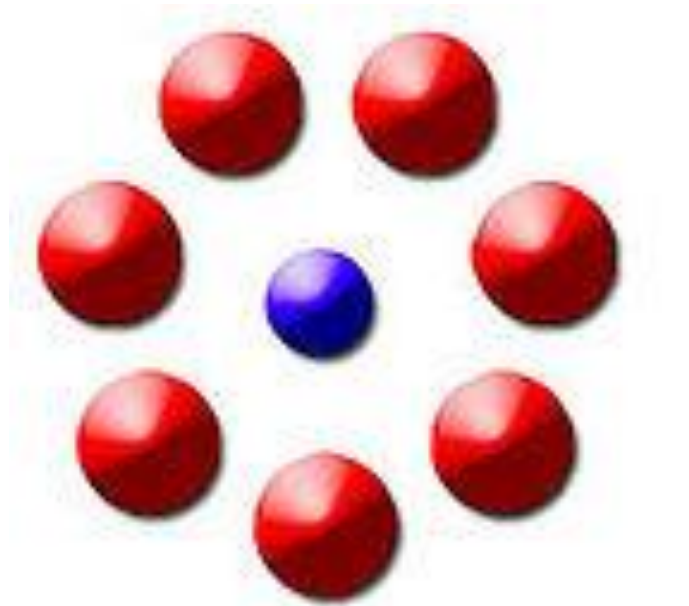


Patient details

- Surgery by gynecologist: 99/101
- Metastasiert pulmonal, 1st/2nd/3rd line n = 17
- M1 PER, 1st/2nd/3rd line n = 40
- Local/locoregional recurrence n = 23
- R1 Resection,
? histology, adjuv. Therapie n = 19

View gynecologist

View sarcoma center



Ebbinghaus Illusion

New patient

- Histology β !
- Reference pathology
- surgical report
- pathology report

Neue Patientin - Einordnung

- low grade ESS
- Leiomyosarcoma
- UES / HGUS
- others
(MMT, invasive leiomyomatosis, intima sarcoma...

Interface to gynecological oncologists

- Sarcomas don't metastasize into lymph nodes
- Indication to ,adjuvant/additive' irradiation
- Typical chemotherapy of endometrial cancer useless
- Doxorubicin \neq GemTax (Geddis Studie)

Phase III randomised study to evaluate the role of adjuvant pelvic radiotherapy in the treatment of uterine sarcomas stages I and II: An European Organisation for Research and Treatment of Cancer Gynaecological Cancer Group Study (protocol 55874)

N.S. Reed^{a,}, C. Mangioni^b, H. Malmström^c, G. Scarfone^d, A. Poveda^e, S. Pecorelli^f, S. Tateo^g, M. Franchi^h, J.J. Jobsenⁱ, C. Coens^j, I. Teodorovic^j, I. Vergote^k, J.B. Vermorken^l*

Benefit of adjuvant RT in CS only

Courtesy: Storz Co.



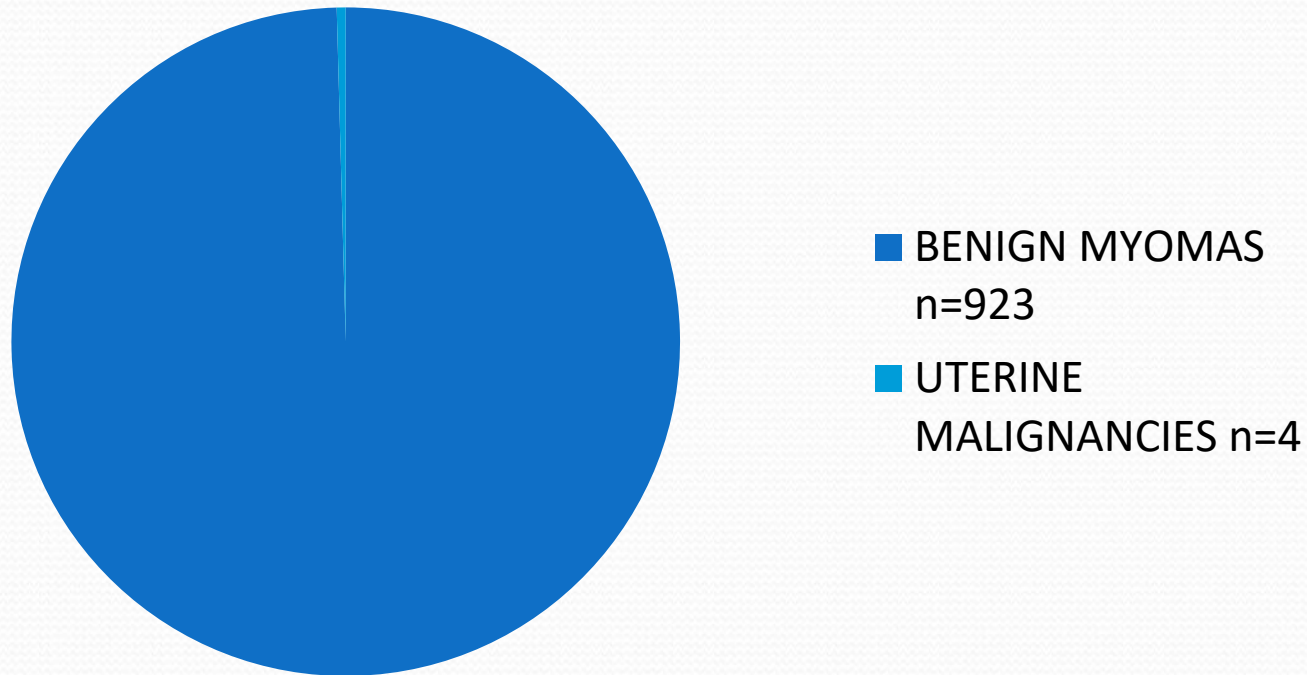
STATE OF THE ART IN GYNAECOLOGICAL, LAPAROSCOPIC SURGERY

STANDARD OF OPERATIVE TECHNIQUE WITH THE NEW
"SUPERCUT SAWALHE II MORCELLATOR"

Martee Hensley, MSKCC

- Easy for us to say, post-hoc, that morcellation is BAD
- But can we conclude that morcellation SHOULD NOT BE DONE?

Incidence of Malignancy= 0.4%

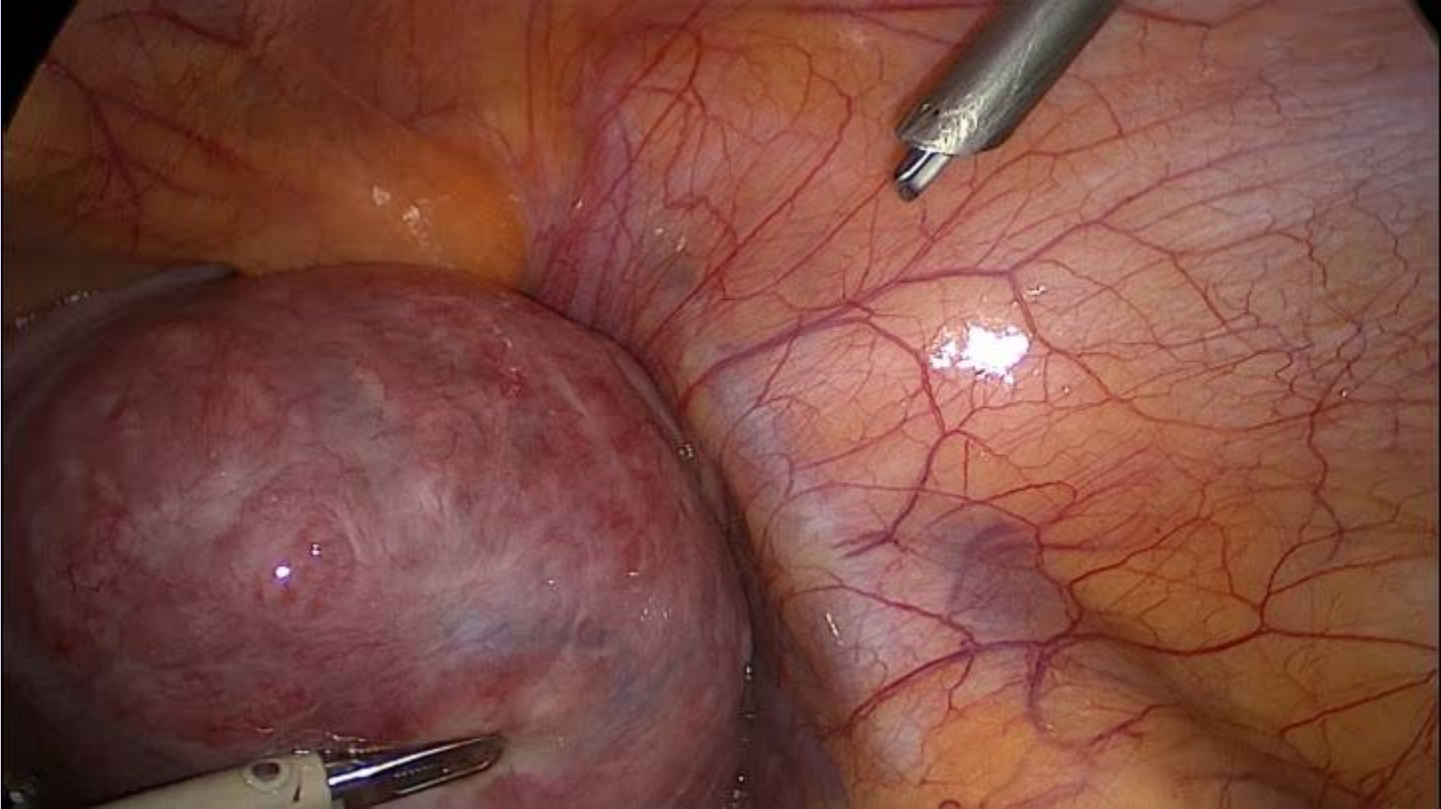


Takamizawa, *Gynecol Obstet Invest* 1999

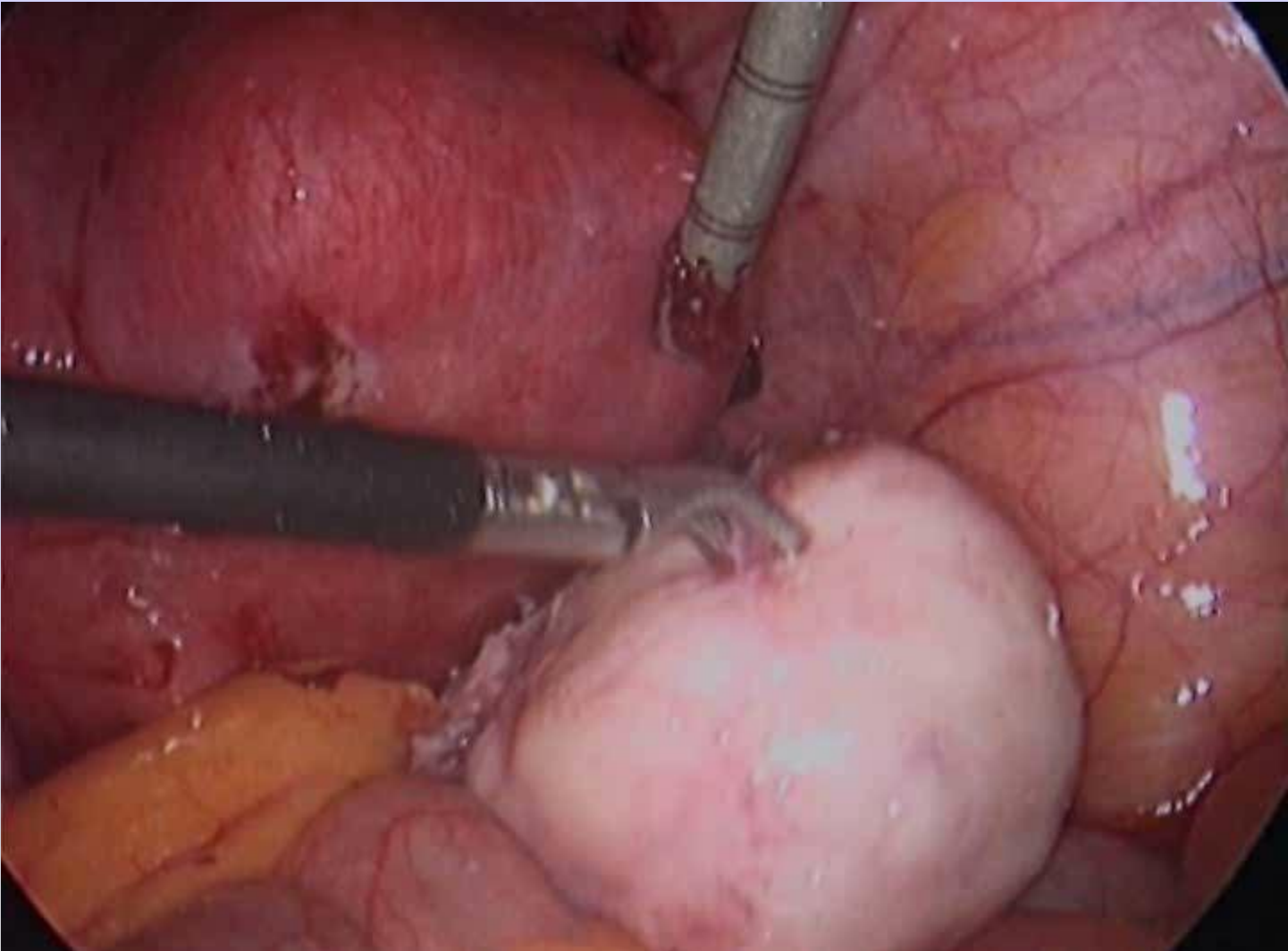
Mori, *Int J Surg* 2018: n=281: 0.36%

Multinu, *Am J GynObstet* 2018, n=4232: 0, 13% overall, bei Myomen 0.39%

Typical procedure for laparoscopic myoma removal from the uterus



What if this leiomyoma is later diagnosed as a leiomyosarcoma ?



Courtesy: Storz Co.

Surgical problems of treatment

- **Sarcoma is not recognized preoperatively**
- Historical and ,modern' operative techniques:
- ,Hooking' and myoma drill of the tumor
- Intraabdominal morcellation
- **Consequence: intraoperative tumor cell spillage**
- **Inoculation of the abdominal cavity**

Ray-Coquard, Eur J Cancer 2018

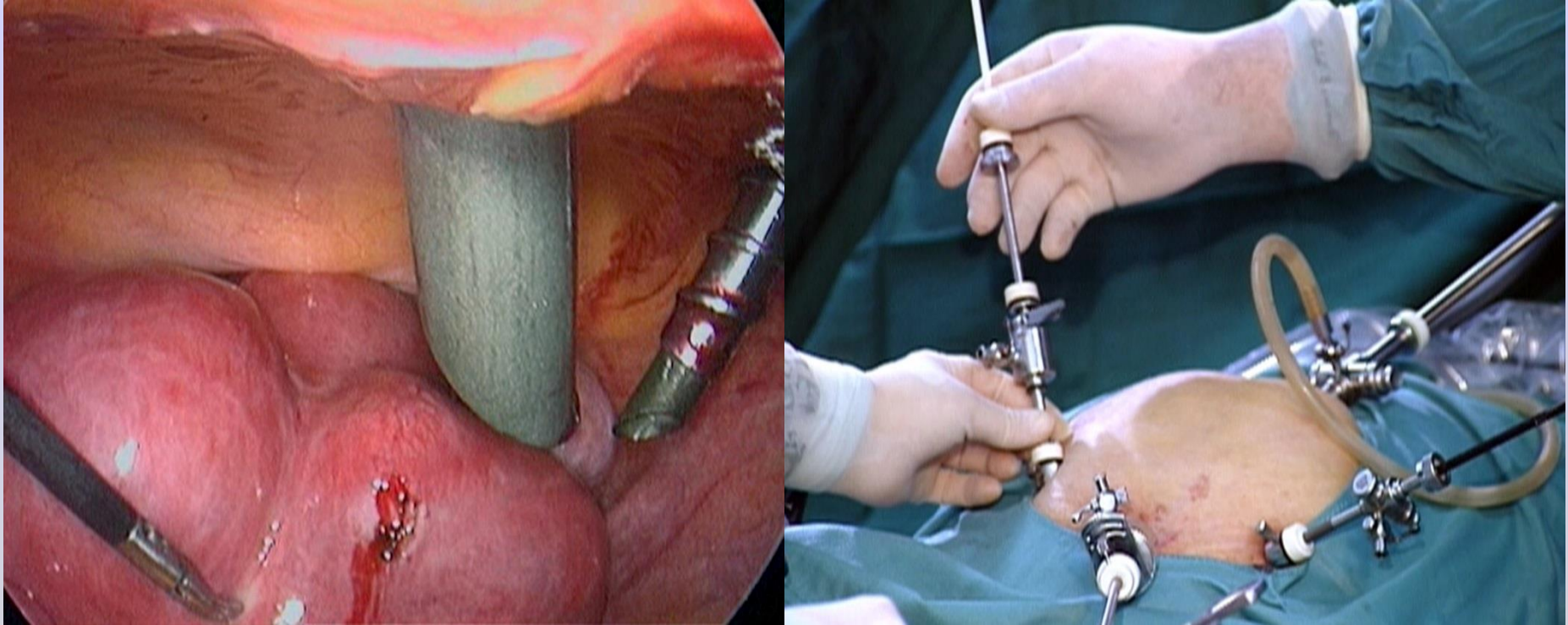
Ray-Coquard J Clin Oncol 2017

Einstein, Int J Gynaecol Cancer 2008

Perri, Int J Gynaecol Cancer 2009

Seidman, PLOS One 2012

Trocar positioning

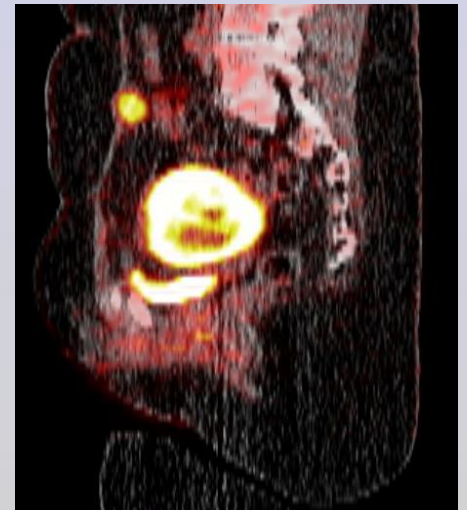
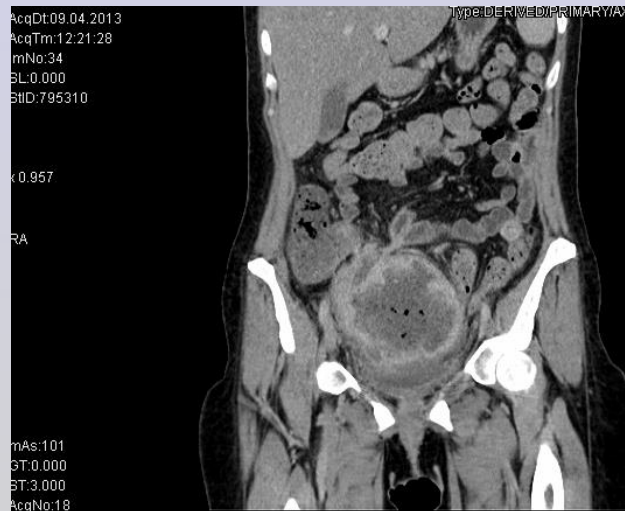
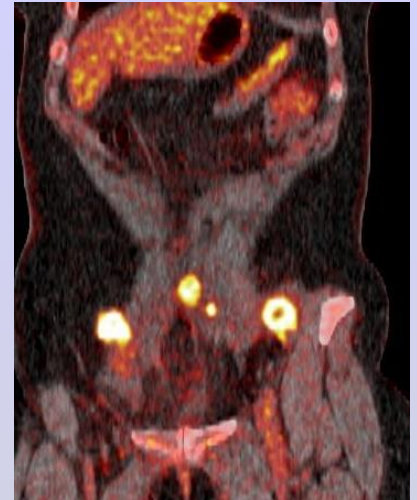


Metastasen= Trokarposition

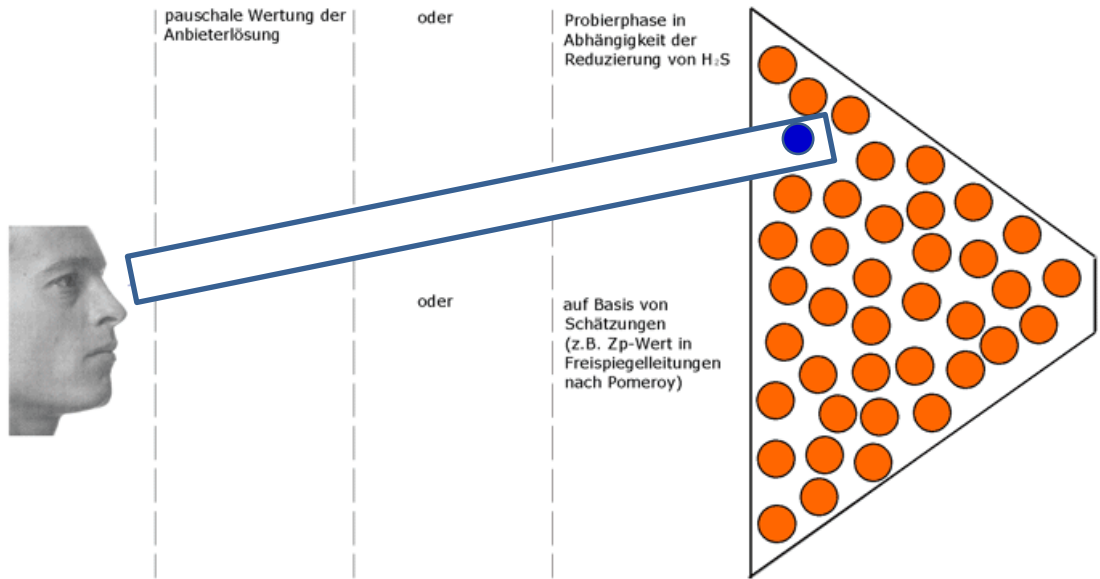
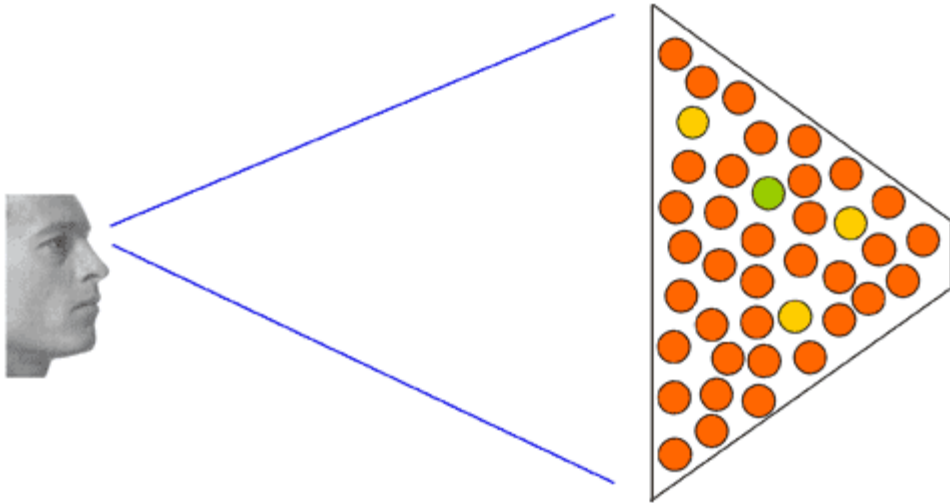
praeoperativ



3 Monate postop.



Verstorben 16.9.2013



Methods

- We tried to identify the impact of intrabdominal fragmentation or damage to the uterus on the occurrence and the time interval of peritoneal metastases of uterine LMS.
- All female patients presenting with advanced sarcoma of uterine origin
- 2004 – 2013, negative selection, typically M1 or locoregionally recurrent
- Retrospectively evaluated
- EORTC example of GIST study 62024

Methods

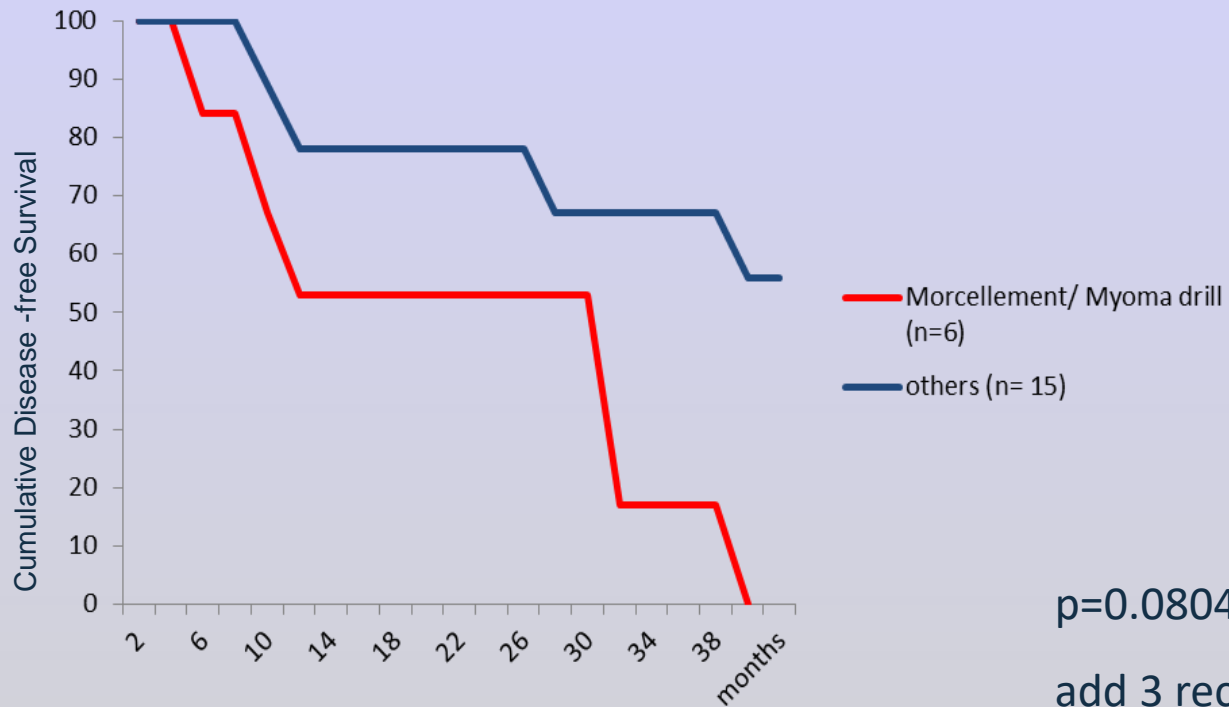
- All female patients presenting with advanced sarcoma of uterine origin
- 2004 – 2013/17, negative selection, typically M1 or locoregionally recurrent
- Retrospectively evaluated.
- We reviewed the record of the operation, the pathology report with special regard to morcellation procedures, the use of myoma drill and completeness of the resection specimen.
- **We set this into correlation with the type of tumor recurrence and clinical course.**

Endpoint of the analysis

retrospective comparison of the
cum **survival time**
without peritoneal recurrence of uterine LMS
in patients **with or without**
intraabdominal **tumor fragmentation** or damage.

Results 4 Status 2013

Cumulative peritoneal recurrence-free survival time



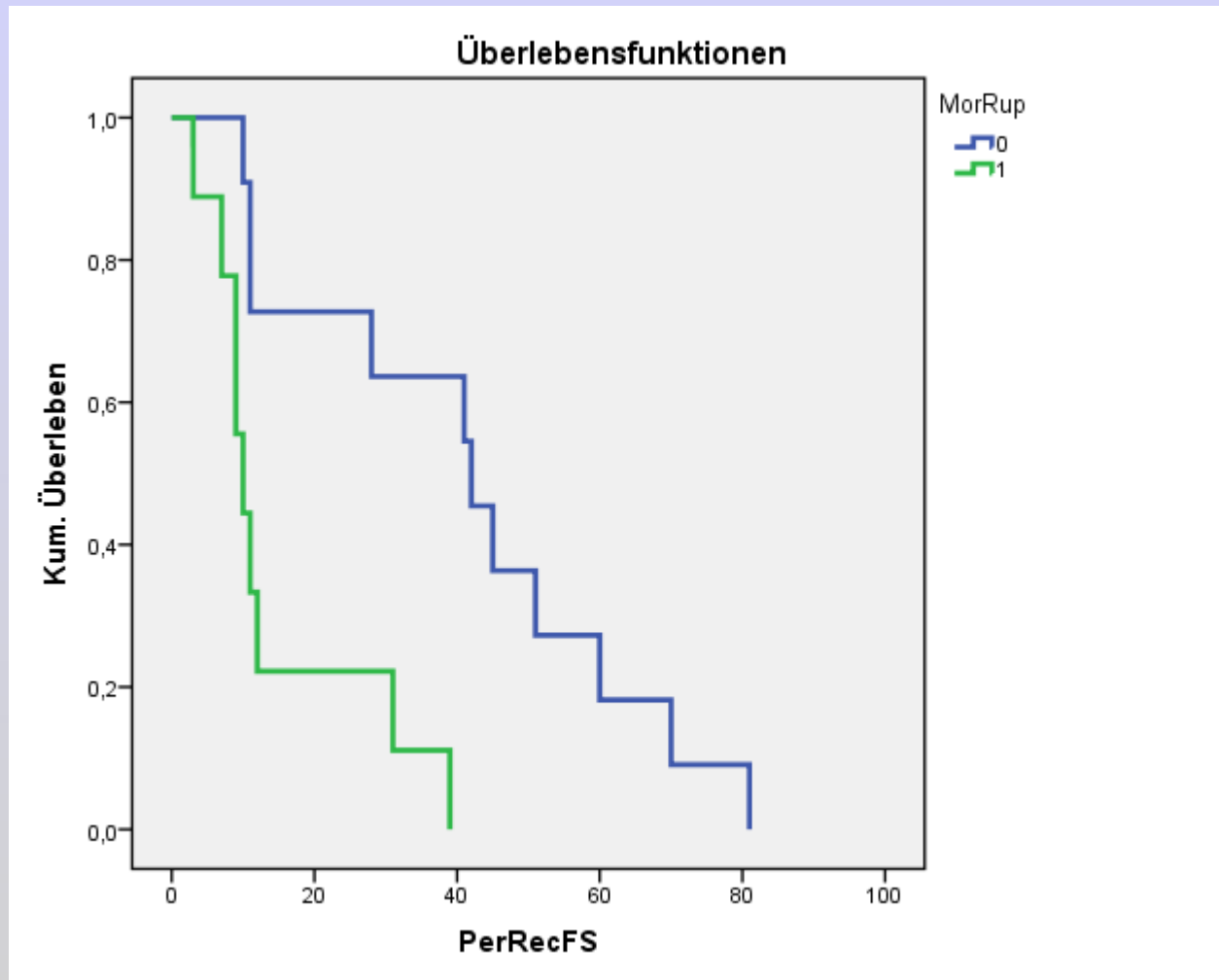
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add 3 recent pts

p=0.0677

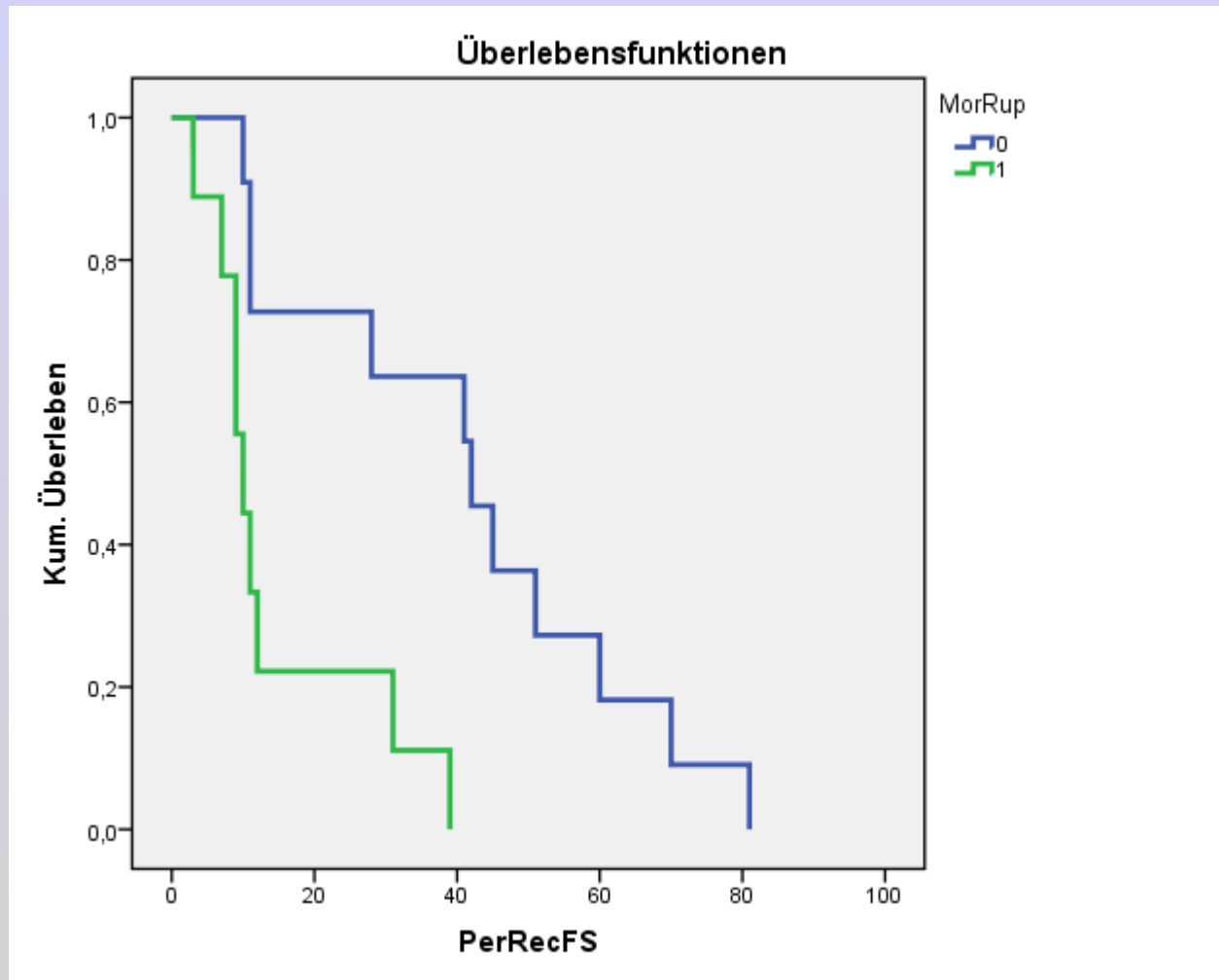
Results 4a: Status 20178

Cumulative RFS time



Results 4 a Status 2017

Cumulative RFS time



Case #29, 43yr: this was later diagnosed as a leiomyosarcoma !

preoperative



2 month follow up

