



Association between Regular Vaginal Dilation and/or Sexual Activity and Long-Term Vaginal Morbidity in Cervical Cancer Survivors



Presented by:

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Disclosure & Study Team

- No conflicts of interest to disclose
- Kathrin Kirchheiner is employed by the Medical University of Vienna, Austria and does not receive any other direct payments
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Purpose/Objective

Patients with **cervical cancer** treated with external beam radiotherapy, chemotherapy internal brachytherapy



Standard of care, if the tumor is locally advanced and cannot be removed by surgery

Modern advances in brachytherapy (use of MRI imaging and precise dose adaptation) → excellent tumor control and high cure rates

Purpose/Objective

Focus on prevention and management of long-term side effects

Ensure good quality of life

↳ Risk for vaginal side effects with impact on sexual health

↳ **Vaginal shortening/narrowing** → formation of scar tissue

- permanent changes in the vaginal tissue
- loss of elasticity often causes pain during intercourse

Clinical recommendations for aftercare
→ regular and ongoing vaginal dilation
with cylinders and/or sexual intercourse



Material/Methods



Multi-institutional



Prospective



Observational

1416 cervical ca. patients included (2008-2015)
median follow-up of **5 years**

**Physician-reported
Vaginal morbidity**



**Patient-reported
Quality of Life and
Sexuality (questionnaires)**



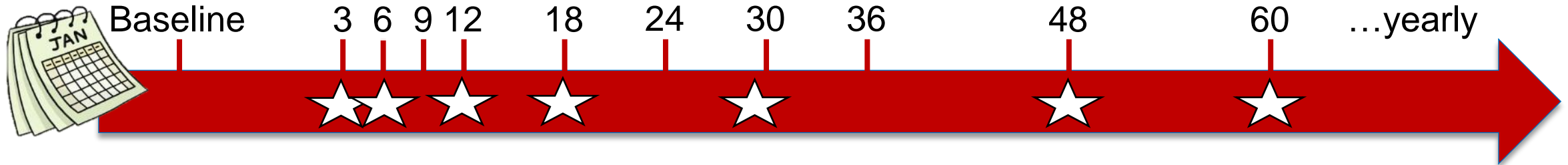
Baseline 3 6 9 12 18 24 30 36 48 60 ...yearly

Longitudinal clinical follow-up visits (months)

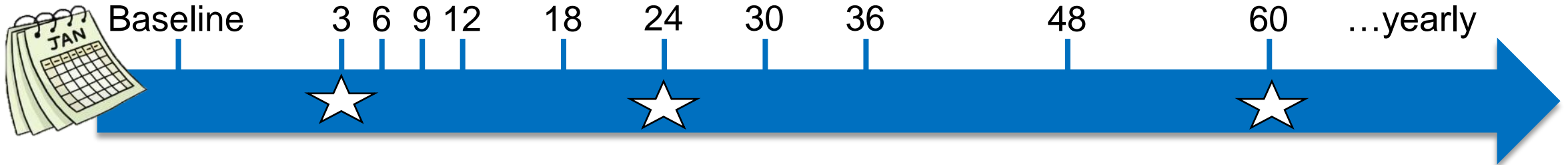
Material/Methods

Sub-cohort of patients with at least 3 follow-up assessments

Regular vaginal dilation and/or sexual activity
if reported in at least half of follow-ups



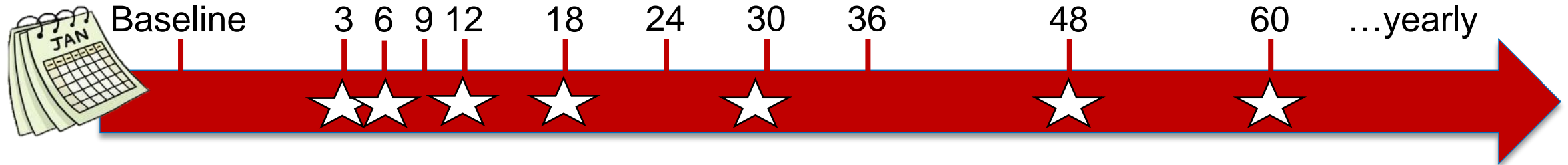
No or infrequent if reported in less than half of follow-ups



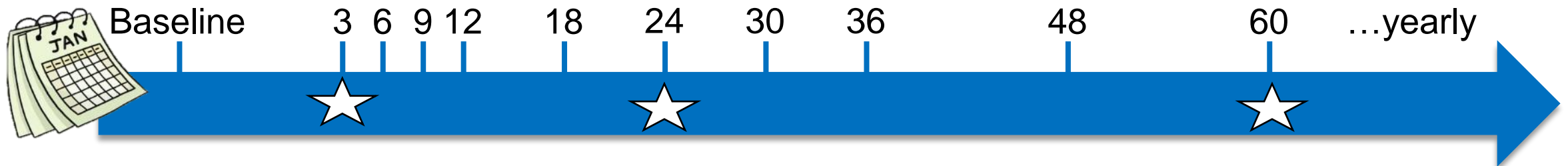
Results

Sub-cohort of patients with at least 3 follow-up assessments **N=882**

Regular vaginal dilation and/or sexual activity if reported in at least half of follow-ups **n=565 (64%)**

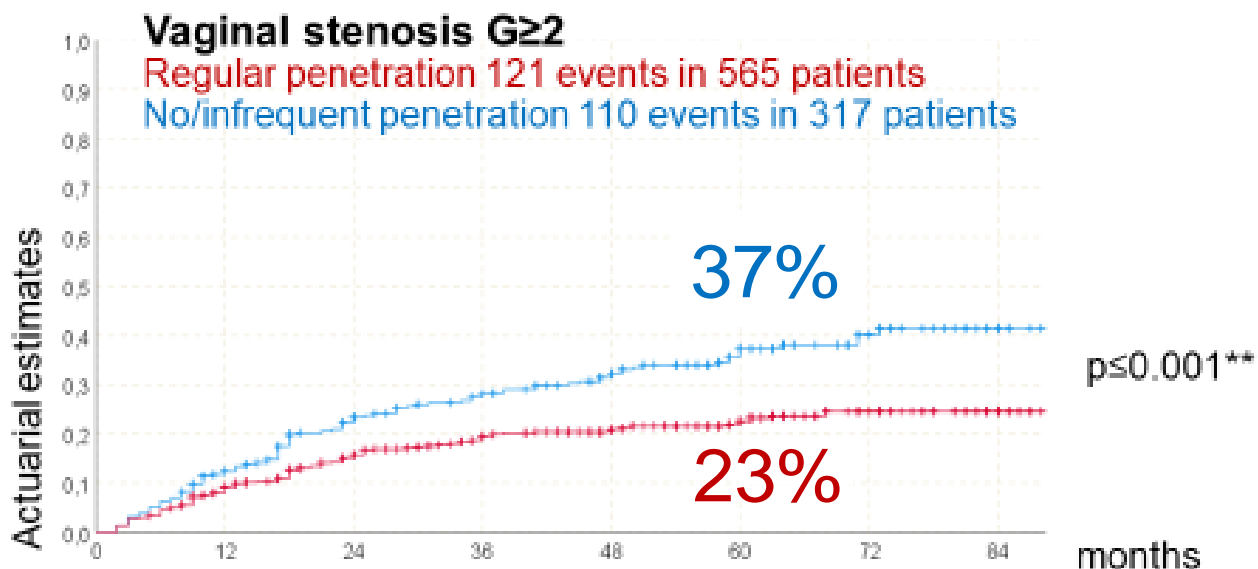


No or infrequent if reported in less than half of follow-ups **n=317 (36%)**



Regular vaginal dilation and/or sexual activity

significantly associated with **less risk for moderate vaginal shortening / narrowing**



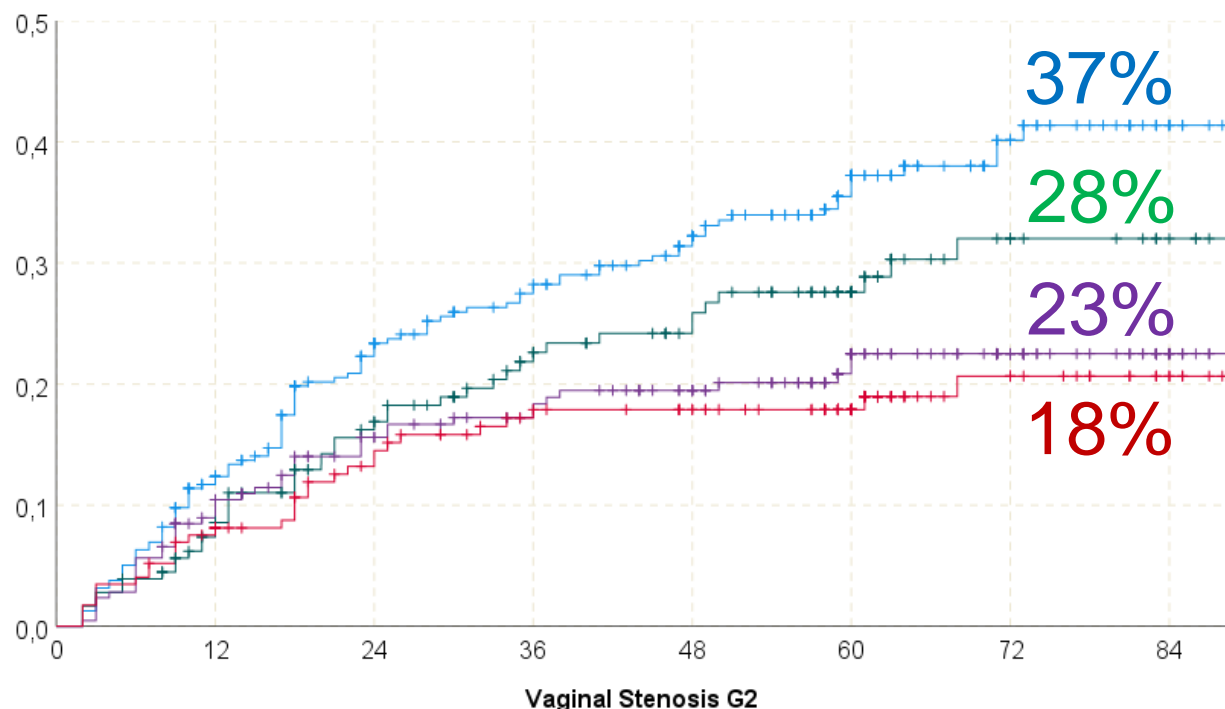
N=882

Confirmed in multivariable model, adjusting for other risk factors

- tumor infiltration
- age
- treatment parameters
- hormonal replacement therapy

Regular vaginal dilation or sexual activity?

5-year actuarial risk vaginal stenosis G \geq 2 (882 patients)



Neither dilation / nor sex

Only dilation / no sex

Only sex / no dilation

Both dilation and sex

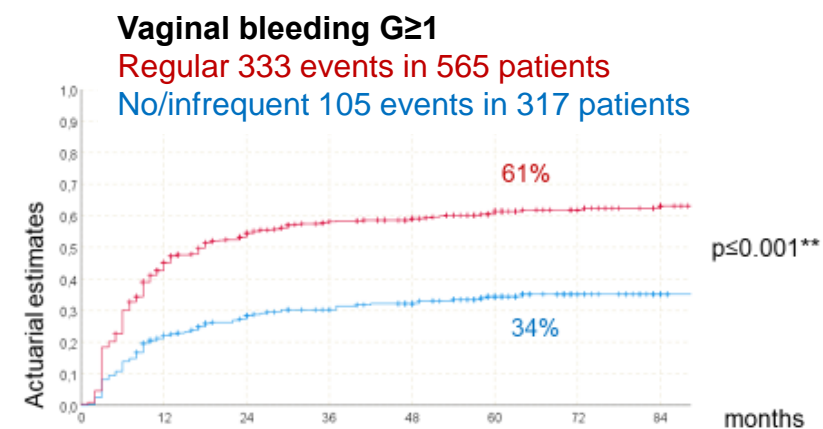
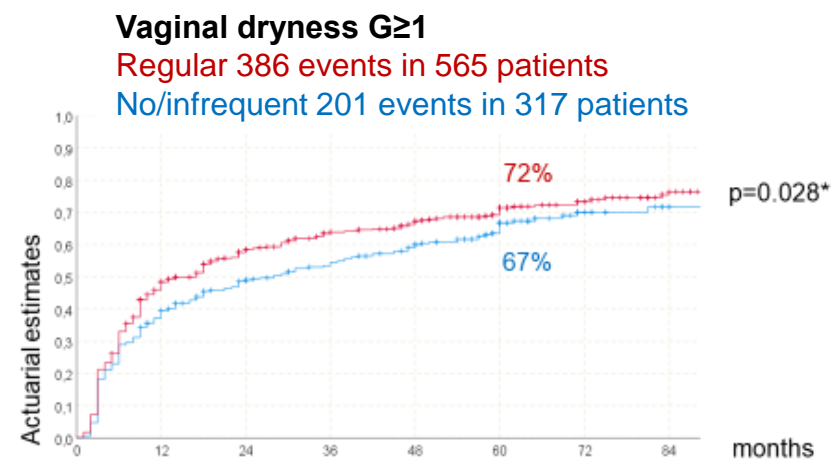
$p \leq 0.001$

Regular vaginal dilation and/or sexual activity

significantly associated with more risk for mild vaginal dryness $G \geq 1$

significantly associated with more risk for mild vaginal bleeding $G \geq 1$

no association to vaginal mucositis (symptoms of inflammation)

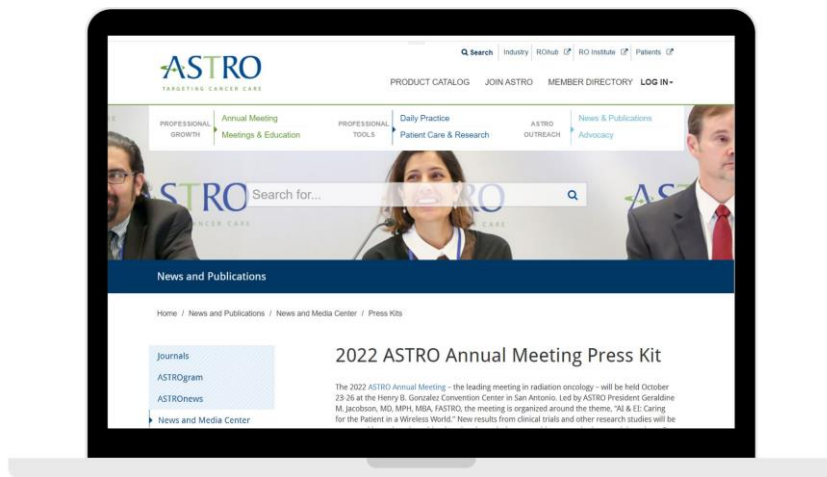


N=882

Conclusion

- Regular vaginal dilation and/or sexual activity is associated with lower risk for moderate vaginal shortening/ narrowing, but higher risk for mild vaginal dryness and bleeding
- While both of these mild symptoms can be managed with lubricants, moisturizer and/or hormonal replacement therapy, moderate vaginal shortening/narrowing represents an irreversible side effect that can cause pain during intercourse in many cervical cancer survivors
- These long-term data support clinical recommendations for dilation and/or sexual activity after radiotherapy

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