**Study Name:** A Genotype-Phenotype Urothelial Cancer

Principal Investigators: Drs. Dean Bajorin/Kenneth Offit

Study

Institution: Memorial Sloan-Kettering Cancer Center

Institution address:

Memorial Sloan-Kettering Cancer Center

1275 York Ave New York, NY, 10065 Phone: 646 888 4067

Key References: None as yet Additional researchers: Drs. Mia Gaudet, David

Gallagher, Robert Hamilton

Study Design: Hospital Based

Case-control

Matching factors: Age, sex, race

Country: USA

ICD-0-3 morphology codes: all

below codes

Follow up of cases? Yes

Expected time of follow-up?

1 yr questionnaire; on-going clinical

|                                       | Cases   | Controls  |
|---------------------------------------|---|---|
| Years of enrollment Source population | May 2009-present<br>MSKCC oncology<br>and urology<br>outpatient clinics | May 2009-present<br>Genetically<br>unrelated people<br>accompanying<br>cases to clinic;<br>patients presenting<br>to MSKCC clinics<br>without any cancer<br>history |
| Response rate (enrolled/eligible)     | NA  | NA  |
| Total number enrolled                 | 840   | 344   |
| Subjects with DNA                     | 840   | 344   |
| Ethnic origin                         | Mixed   | Mixed   |
| Age: mean (range)                     | 68 (22-96)  | 62 (23-88)  |
| Gender: % males                       | 76%   | 31%   |

| Questionnaire data  | Cases | Controls  |
|---|-------|-----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | Х         |
| Active smoking  | X     | X         |
| Passive smoking   | X     | X         |
| Occupational exposures                                    | X     | Χ         |
| Residential history                                       |       |           |
| Water chlorination byproducts                             |       |           |
| Arsenic exposure  |       |           |
| Other environmental exposures                             |       |           |
| Hair dye use  | X     | X         |
| Drug use  | X     | Χ         |
| Medical History   | X     | X-partial |
| Family History  | X     |           |
| Quality of life   |       |           |
| Diet/nutrition  |       |           |
| Caffeine intake   | X     | X         |
| Fluid intake  | X     | Χ         |
| Urine pH measurements                                     |       |           |
| Other information, please specify                         |       |           |

Blood DNA
Buccal DNA X X
Serum/plasma
Cryopreserved whole blood / lymphocytes
Red blood cells
Urine samples
Toenail clippings
Others, please specify
Paraffin tissue blocks X
Frozen tissue X
(some)

#### For Cases Only

Note: Approximately half of our patients are classified as superficial disease, and some more data is collected on them (indicated by "S" below)

| Concessed on them (maleated by C below) |             |
|---|-------------|
| Information at time of diagnosis        |             |
| Histological confirmation               | X           |
| Number of tumors                        |             |
| Tumor site                              | Χ           |
| Tumor size                              |             |
| Tumor grade                             | X           |
| Growth pattern                          |             |
| Treatment of primary tumor              | Χ           |
| Stage                                   | X           |
| Other information, please specify       |             |
| Follow-up information                   |             |
| Treatment information                   | X           |
| Tumor recurrence                        | X           |
| Tumor progression                       | S           |
| Survival                                | X           |
| Histological confirmation               | S           |
| Number of tumors                        | X           |
| Tumor site                              | Χ           |
| Tumor size                              | S<br>S<br>S |
| Tumor grade                             | S           |
| Growth pattern                          | S           |
| Stage                                   | S           |
| Active smoking                          | Χ           |
| Occupational exposures                  |             |
| Drug use                                |             |
| Medical History                         | X           |
| Quality of life                         |             |
| Caffeine intake                         |             |
| Fluid intake                            |             |
| Other information , please specify      |             |

Study Name (Symbol):

Spanish Bladder Cancer Study (SBCS)

Institution/s:

National Cancer Institute Division of Cancer Epidemiology and Genetics (NCI-DCEG),

Rockville, MD

Institut Municipal d'Investigacio Medica (IMIM),

Barcelona, Spain

**Principal Investigators:** 

NCI-DCEG: Debra Silverman, Nathaniel Rothman,

Montse Garcia-Closas

IMIM: Manolis Kogevinas, Nuria Malats, Paco Real

Institution/s address:

**NCI-DCEG** 

6120 Executive Boulevard Bethesda, MD USA 20852-7234

Centre for Research in Environmental Epidemiology (CREAL), Respiratory and Environmental Health Research Unit, Dr Aiguader 80, 08003 Barcelona, Spain

**Key References:** 

Rothman N et al. Nature Gen. 2010

Nov;42(11):978-84

Cantor K et al. Environ Health Perspect. 2010 Jul

30. [Epub]

Silverman DT. Int J Cancer. 2008 Oct

1;123(7):1644-8.

Samanic C et al. Cancer Epidemiol Biomarkers

Prev. 2006 Jul;15(7):1348-54

Lopez-Knowles E et al. Clin Cancer Res. 2006 Oct

15;12(20 Pt 1):6029-36

Garcia-Closas M et al. Lancet. 2005 Aug 20-

26;366(9486):649-59

Additional researchers:

Kenneth Cantor, NCI-DCEG Joan Fortuny, IMIM

Montserrat Garcia-Closas, NCI-DCEG

Lee Moore, NCI-DCEG Jonine Figueroa, NCI-DCEG Joanne Colt, NCI-DCEG Ludmila Prokunina, NCI-DCEG Claudine Samanic, NCI-DCEG

Stephen Chanock, NCI-DCEG

**IRB** Information

Name of PI for the IRB approved protocol

Debra Silverman

Study Design: **Matching factors:** 

Hospital based Case-Control ICD-0-3 morphology codes:

81203, 80703, 81303, 81403

Gender, age, hospital/region

Follow up of cases? Yes

Country: Spain

Expected time of follow-up?

64 - 90 months

|                                   | Cases                              | Controls                           |
|-----------------------------------|------------------------------------|------------------------------------|
| Years of enrollment               | 1998-2001                          | 1998-2001                          |
| Source population                 | 18 hospitals in 5 regions of Spain | 18 hospitals in 5 regions of Spain |
| Response rate (enrolled/eligible) | 84%                                | 88%                                |
| Total number enrolled             | 1219                               | 1271                               |
| Subjects with DNA                 | 1150                               | 1149                               |
| Ethnic origin                     | 99% Caucasian                      | 99% Caucasian                      |
| Age: mean (range)                 | 66 (21-80)                         | 65(21-80)                          |
| Gender: % males                   | 87%                                | 87%                                |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | X     | X        |
| Active smoking  | X     | X        |
| Passive smoking   | X     | X        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | X     | X        |
| Water chlorination byproducts                             | X     | X        |
| Arsenic exposure  |       |          |
| Other environmental exposures                             | X     | X        |
| Hair dye use  | X     | X        |
| Drug use  | X     | X        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   | X     | X        |
| Diet/nutrition  | x     | x        |

| Caffeine intake                   | X | Х |
|-----------------------------------|---|---|
| Fluid intake                      | X | Х |
| Urine pH measurements             | Х | Х |
| Other information, please specify | _ | _ |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | х     | X        |
| Buccal DNA                              | x     | X        |
| Serum/plasma                            | x     | x        |
| Cryopreserved whole blood / lymphocytes | x     | x        |
| Red blood cells                         | x     | x        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | x     | x        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | x     |          |
| Frozen tissue                           | -     |          |

| Information at time of diagnosis   |   |
|------------------------------------|---|
| Histological confirmation          | X |
| Number of tumors                   | Х |
| Tumor site                         | X |
| Tumor size                         | Х |
| Tumor grade                        | X |
| Growth pattern                     | X |
| Treatment of primary tumor         | - |
| Stage                              | X |
| Other information, please specify  | - |
| Follow-up information              |   |
| Treatment information              | X |
| Tumor recurrence                   | X |
| Tumor progression                  | - |
| Survival                           | X |
| Histological confirmation          | X |
| Number of tumors                   | X |
| Tumor site                         | X |
| Tumor size                         | X |
| Tumor grade                        | X |
| Growth pattern                     | X |
| Stage                              | X |
| Active smoking                     | X |
| Occupational exposures             | X |
| Drug use                           | X |
| Medical History                    | X |
| Quality of life                    | X |
| Caffeine intake                    | X |
| Fluid intake                       | Х |
| Other information , please specify | - |
|                                    |   |

New England Bladder Cancer Study

Institutions:

National Cancer Institute Division of Cancer Epidemiology and Genetics (NCI-DCEG)

**Dartmouth Medical School** 

New Hampshire Department of Health and Human

Services

Maine Department of Health and Human Services,

Vermont Cancer Registry

**Principal Investigators:** 

NCI-DCEG: Debra Silverman, Dalsu Baris

Dartmouth Medical School: Margaret Karagas, Richard

Wadell

Department of Health and Human Services, Maine

Cancer Registry: Molly Schwenn

VT Cancer Registry: Alison Johnson

**Key References:** 

Baris D. et al. J Natl Cancer Inst. 2009 Nov 18;101(22):1553-61. Epub 2009 Nov 16.Colt JS, et al. Occup Environ Med. 2010 Sep 23.

[Epub ahead of print]

Moore L, et al. Carcinogenesis. 2010 Oct 29.

[Epub ahead of print]

Institution address:

NCI-DCEG:

6120 Executive Boulevard Bethesda, MD USA 20852-7234

**Dartmouth Medical School:** 

7927 Rubin Building, One Medical Center Drive,

Lebanon, NH 03756

Department of Health and Human Services, Maine

Cancer Registry:

Key Bank Plaza, 4th Floor Augusta, ME 04333 VT Cancer Registry:

108 Cherry Street, Burlington, VT 05401

Additional researchers:

Angeline Andrew (Dartmouth Medical School)

Bill Apao (Vermont)

Laura Beane-Freeman (NCI)

Ken Cantor (NCI, Lead Investigator) Sai Cherala (New Hampshire) Montserrat Garcia-Closas (NCI) Joanne Colt (NCI, Lead Investigator)

Jay Lubin (NCI)

Lee Moore (NCI)

Nathaniel Rothman (NCI, Lead Investigator) Alan Schned (Dartmouth Medical School)

Castine Verrill (Maine)

Study Design: Population based Case-Control

ICD-9 code: 189.8

ICD-0-3 morphology codes: 7400/6, 7400/7, 8010/2, 8032/3, 8041/3, 8053/0, 8070/3, 8120/3,

8130/3, 8140/3

Matching factors: age and sex Follow up of cases? Feasibility study is being initiated

Country: USA Expected time of follow-

up?

Controls

Х

|                                   | Cases  | Controls  |
|-----------------------------------|--|---|
| Years of enrollment               | 2001-2004  | 2001-2004   |
| Source population                 | Newly diagnosed incident cases in the states of New Hampshire, Maine and Vermont | Frequency matched controls selected from Department of Motor Vehicle (<65 years of age) and Centers of Medicare and Medicaid Services (>=65 years of age) |
| Response rate (enrolled/eligible) | 65%  | 65%   |
| Total number enrolled             | 1,213  | 1,418   |
| Subjects with DNA                 | 1,134  | 1,306   |
| Ethnic origin                     | 94% Caucasian  | 94% Caucasian   |
| Age: mean (range)                 | 65.16 (30-79)  | 64.52 (30-79)   |
| Gender: % males                   | 76% males  | 73%   |

| Active smoking                    | Х | Х |
|-----------------------------------|---|---|
| Passive smoking                   | Х | Х |
| Occupational exposures            | X | X |
| Residential history               | X | X |
| Water chlorination byproducts     | X | Х |
| Arsenic exposure                  | X | X |
| Other environmental exposures     | X | X |
| Hair dye use                      | X | Х |
| Drug use                          | X | Х |
| Medical History                   | X | Х |
| Family History                    | X | Χ |
| Quality of life                   | - | - |
| Diet/nutrition                    | X | Χ |
| Caffeine intake                   | X | Х |
| Fluid intake                      | X | X |
| Urine pH measurements             | X | Χ |
| Other information, please specify | - | - |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | Х     | X        |
| Buccal DNA                              | X     | X        |
| Serum/plasma                            | X     | X        |
| Cryopreserved whole blood / lymphocytes | X     | X        |
| Red blood cells                         | X     | X        |
| Urine samples                           | X     | X        |
| Toenail clippings                       | X     | X        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | X     |          |
| Frozen tissue                           | -     |          |

| Information at time of diagnosis   |   |
|------------------------------------|---|
| Histological confirmation          | X |
| Number of tumors                   | X |
| Tumor site                         | X |
| Tumor size                         | X |
| Tumor grade                        | X |
| Growth pattern                     | X |
| Treatment of primary tumor         | - |
| Stage                              | X |
| Other information, please specify  | - |
| Follow-up information              |   |
| Treatment information              | - |
| Tumor recurrence                   | - |
| Tumor progression                  | - |
| Survival                           | - |
| Histological confirmation          | - |
| Number of tumors                   | - |
| Tumor site                         | - |
| Tumor size                         | - |
| Tumor grade                        | - |
| Growth pattern                     | - |
| Stage                              | - |
| Active smoking                     | - |
| Occupational exposures             | - |
| Drug use                           | - |
| Medical History                    | - |
| Quality of life                    | _ |
| Caffeine intake                    | - |
| Fluid intake                       | _ |
| Other information , please specify | _ |

Nijmegen Bladder Cancer Study

**Principal Investigators:**Prof. Dr. Lambertus (Bart) A. Kiemeney (RUNMC)

Dr. Katja K.H. Aben (IKO)

Dr. Sita H. Vermeulen (RUNMC)

**Key References:** 

Kiemeney LA, Sulem P, Besenbacher S, et.al. A sequence variant at 4p16.3 confers susceptibility to urinary bladder cancer. Nat Genet 2010;

42(5): 415-9.

Kiemeney LA, Thorlacius S, Sulem P, et.al. Sequence variant on 8q24 confers susceptibility to urinary bladder cancer. Nat Genet 2008;

40(11): 1307-1312.

Institution:

Radboud University Nijmegen Medical Centre (RUNMC)

Nijmegen, the Netherlands

Comprehensive Cancer Centre East (IKO)

Nijmegen, the Netherlands

Institution address:

Radboud University Nijmegen Medical Centre (RUNMC)

Department of Epidemiology and Biostatistics (133)

Department of Urology (459)

P.O. Box 9101

NL-6500 HB Nijmegen, the Netherlands

Comprehensive Cancer Centre East (IKO)

P.O. Box 1281

NL-6501 BG Nijmegen, the Netherlands

Additional researchers:

Prof. Dr. J. Alfred (Fred) Witjes, RUNMC

Dr. Martin den Heijer, RUNMC

Dr. Dorine Swinkels, RUNMC

Dr. Barbara Franke, RUNMC

Study Design:

Population-based case-control. Cases have been retrospectively and are prospectively being identified and recruited from the population-based cancer registry of IKO

ICD-0-3 morphology codes:

8000, 8020, 8041, 8045, 8070, 8071, 8120, 8130, 8140, 8246, 8480, 8481, 8490, 8560, 8700

Matching factors: Country:

the Netherlands

Follow up of cases? Yes

Expected time of follow-up?

Currently 1-15 years

|                                   | Cases                | Controls           |
|-----------------------------------|----------------------|--------------------|
| Years of enrollment               | 2007-2010 (years     | 2002-2003          |
|                                   | of diagnosis 1975-   |                    |
|                                   | 2009)                |                    |
| Source population                 | IKO Population-      | Nijmegen Municipal |
|                                   | based cancer         | Population         |
|                                   | registry, covering 8 | Administration     |
|                                   | hospitals and 1.3    | covering 150,000   |
|                                   | million inhabitants  | inhabitants        |
| Response rate (enrolled/eligible) | 62%                  | 9,350 / 21,756 ->  |
|                                   |                      | 43%                |
| Total number enrolled             | 1974                 | 9,350              |
| Subjects with DNA                 | 1914                 | 6468               |
| Ethnic origin                     | >99% Caucasian       | >99% Caucasian     |
| Age: mean (range)                 | 62.3 range (25-93)   | 54 (18 – 100)      |
| Gender: % males                   | 81.5%                | 46                 |
|                                   |                      |                    |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | X     | X        |
| Active smoking  | X     | X        |
| Passive smoking   |       |          |
| Occupational exposures                                    | X     | X        |
| Residential history                                       |       |          |
| Water chlorination byproducts                             |       |          |
| Arsenic exposure  |       |          |
| Other environmental exposures                             |       |          |
| Hair dye use  | X     | X        |
| Drug use  | X     | X        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   |       |          |
| Diet/nutrition  | Х     | X        |

Caffeine intake Х Fluid intake Χ Urine pH measurements Other information, please specify: physical physical \* incl. urinary tract infections treated with antibiotics, bladder stones, activity, activity catheter, X-ray exposure abdomen/pelvis artificial # exposure during conception / pregnancy first child, including cosmetic products, X-ray, anaesthetics, cytostatics, industrial sweeteners, urination cleaners, paint, pesticides. frequency

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | X        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | -     | X        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | -     | X        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | X     |          |
| Frozen tissue                           | -     |          |

| . c. cacco cy                     |   |
|-----------------------------------|---|
| Information at time of diagnosis  |   |
| Histological confirmation         | Х |
| Number of tumors                  |   |
| Tumor site                        | X |
| Tumor size                        |   |
| Tumor grade                       | X |
| Growth pattern                    |   |
| Treatment of primary tumor        | X |
| Stage                             | X |
| Other information, please specify |   |
| Follow-up information             |   |
| Treatment information             |   |
| Tumor recurrence                  | x |
| Tumor progression                 | X |
| Survival                          | x |
| Histological confirmation         | X |
| Number of tumors                  | X |
| Tumor site                        | X |
| Tumor size                        | X |
| Tumor grade                       | X |
| Growth pattern                    | X |
| Stage                             | X |
| Active smoking                    | X |
| Occupational exposures            |   |
| Drug use                          |   |
| Medical History                   | X |
| Quality of life                   |   |
| Caffeine intake                   |   |
| Fluid intake                      |   |
| Other information, please specify |   |

M.D. Anderson Bladder Cancer Study

**Principal Investigators:** 

Xifeng Wu

Key References:

**PMID** 

Wu X. et al. 2009 Nat Genet 41 (9) 991-5. Wu X. et al. 2007. J Clin Oncol 25 (31): 4974-81. Institution:

The University of Texas M. D. Anderson Cancer Center

Institution address:

1515 Holcombe Blvd, Houston, TX 77030

Additional researchers:

Study Design:Matching factors:Country:Hospital based Case-ControlAge, gender, ethnicityUSA

ICD-0-3 morphology codes: Follow up of cases? Yes Expected time of follow-up?

180 8

|                                   | Cases                 | Controls          |
|-----------------------------------|-----------------------|-------------------|
| Years of enrollment               | 1999-2009             | 1999-2009         |
| Source population                 | M.D. Anderson         | Houston           |
|                                   | Hospital              | Metropolitan Area |
| Response rate (enrolled/eligible) | 92%                   | 77%               |
| Total number enrolled             | 1542                  | 1610              |
| Subjects with DNA                 | 1542                  | 1610              |
| Ethnic origin                     | Caucasian 91.8%       | Matched to cases  |
|                                   | Hispanic 3.8%         |                   |
|                                   | African American 3.5% | 0                 |
|                                   | Other 0.9%            |                   |
| Age: mean (range)                 | 63.4 (18-89)          | 62.5 (21-89)      |
| Gender: % males                   | 79.1% ´               | 77.4%             |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | Х        |
| Active smoking  | Х     | X        |
| Passive smoking   | X     | X        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | -     | -        |
| Water chlorination byproducts                             | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                             | X     | X        |
| Hair dye use  | X     | X        |
| Drug use  | -     | -        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake   | -     | -        |
| Fluid intake  | X     | X        |
| Urine pH measurements                                     | -     | -        |
| Other information, please specify                         | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | Х     | X        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | X     | X        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |

Paraffin tissue blocks
Frozen tissue

| Information at time of diagnosis   | _            |
|------------------------------------|--------------|
| Histological confirmation          | X            |
| Number of tumors                   | -            |
| Tumor site                         | -            |
| Tumor size                         | X            |
| Tumor grade                        | X            |
| Growth pattern                     | -            |
| Treatment of primary tumor         | X            |
| Stage                              | X            |
| Other information, please specify  | <del>-</del> |
| Follow-up information              |              |
| Treatment information              | X            |
| Tumor recurrence                   | X            |
| Tumor progression                  | X            |
| Survival                           | X            |
| Histological confirmation          | X            |
| Number of tumors                   | X            |
| Tumor site                         | -            |
| Tumor size                         | X            |
| Tumor grade                        | X            |
| Growth pattern                     | -            |
| Stage                              | X            |
| Active smoking                     | X            |
| Occupational exposures             | X            |
| Drug use                           | -            |
| Medical History                    | X            |
| Quality of life                    | -            |
| Caffeine intake                    | -            |
| Fluid intake                       | X            |
| Other information , please specify | -            |
|                                    |              |

The Los Angeles-Shanghai Bladder Cancer Study

**Principal Investigators:** 

Ronald K. Ross (deceased, now Malcolm C. Pike)

050

Jian-Min Yuan, subcontract to University of

Minnesota

**Key References:** 

(1) Int J Cancer 2004 110: 417; (2) Carcinogenesis 2003 24: 1645; (3) Eur J Epidemiol 2003 18: 659; (4) CEBP 2003 12: 503; (5) Carcinogenesis, 24: 483-489, 2003; (6) J Natl Cancer Inst 2001 93: 538; (7) Int J Cancer 2001 91

575; (8) Br J Cancer 2000 82: 1364.

Institution:

USC/Norris Comprehensive Cancer Center University of Minnesota Cancer Center

Institution address:

USC/Norris Cancer Center 1441 Eastlake Avenue Los Angeles, California 90089

University of Minnesota Cancer Center 1300 South Second Street, Suite 300 Minneapolis, Minnesota 55454

Additional researchers:

University of Minnesota: Mimi C. Yu USC: J. Esteban Castelao, David Conti, Victoria Cortessis, Manuela Gago-Dominguez,

Mariana Stern, Duncan Thomas,

David Van Den Berg

Study Design: Population based Case-

Control

ICD-0-3 morphology codes: -

Matching factors: Age, gender, sex

Follow up of cases?-

Country: United States and China

Expected time of follow-up?-

|                                   | Cases  | Controls  |
|-----------------------------------|--|---|
| Years of enrollment               | <b>LA</b> : 1988-1999<br><b>Shanghai</b> : 1996-1999   | <b>LA:</b> 1988-1999<br><b>Shanghai:</b> 1996-1999  |
| Source population                 | LA: non-Asian<br>residents of Los<br>Angeles County,<br>California<br>Shanghai: Han<br>Chinese residents of<br>city of Shanghai      | LA: non-Asian<br>residents of Los<br>Angeles County,<br>California<br>Shanghai: Han<br>Chinese residents of<br>city of Shanghai |
| Response rate (enrolled/eligible) | <b>LA:</b> 70% (1671/2384)   | <b>LA:</b> 69% 1 <sup>st</sup> and 31% ≥2 <sup>nd</sup> eligible controls   |
|                                   | <b>Shanghai:</b> 83% (622/749)   | Shanghai: 84%   |
| Total number enrolled             | <b>LA</b> : 1671<br><b>Shanghai:</b> 622   | <b>LA:</b> 1568<br><b>Shanghai:</b> 610   |
| Subjects with DNA                 | LA: 723<br>Shanghai: 545   | LA: 760<br>Shanghai: 537  |
| Ethnic origin                     | LA: 92.3% non-<br>Hispanic white<br>4.3% Hispanic white<br>3.3% African American<br>0.1% Native American<br>Shanghai: Han<br>Chinese |   |
| Age: mean (range)                 | <b>LA:</b> 56 (25-69) <b>Shanghai</b> :  | LA: 56 (25-69)<br>Shanghai:   |
| Gender: % males                   | LA: 78.6%<br>Shanghai: 79%   | LA: 78.0%<br>Shanghai: 77%  |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | Х        |
| Active smoking  | X     | X        |
| Passive smoking among lifelong nonsmokers                 | Х     | X        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | -     | -        |
| Water chlorination byproducts                             | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                             | X     | X        |
| Hair dye use  | X     | X        |
| Drug use  | X     | X        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake (incomplete coverage?)                    | Х     | X        |
| Fluid intake (incomplete coverage?)                       | X     | X        |
| Urine pH measurements                                     | X     | X        |
| Other information, use of hormone for women only          | X     | X        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | Х     | Х        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | Х     | Χ        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | X     | X        |
| Urine samples                           | X     | X        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | X     |          |
| Frozen tissue                           | -     |          |

| Information at time of diagnosis  |   |
|-----------------------------------|---|
| Histological confirmation         | - |
| Number of tumors                  | - |
| Tumor site                        | - |
| Tumor size                        | - |
| Tumor grade                       | - |
| Growth pattern                    | - |
| Treatment of primary tumor        | - |
| Stage                             | - |
| Other information, please specify | - |
| Follow-up information             |   |
| Treatment information             | - |
| Tumor recurrence                  | - |
| Tumor progression                 | - |
| Survival                          | - |
| Histological confirmation         | - |
| Number of tumors                  | - |
| Tumor site                        | - |
| Tumor size                        | - |
| Tumor grade                       | - |
| Growth pattern                    | - |
| Stage                             | - |
| Active smoking                    | - |
| Occupational exposures            | - |
| Drug use                          | - |
| Medical History                   | - |
| Quality of life                   | - |
| Caffeine intake                   | - |
| Fluid intake                      | - |
| Other information, please specify | - |

New Hampshire Bladder Cancer Study

Institution:

Dartmouth Medical School Section of biostatistics and

epidemiology

**Principal Investigators:** 

Margaret R Karagas

Institution address:

7927 Rubin Building One Medical Center Drive Lebanon, NH 03756"

**Key References:** 

Karagas MR. et al. Environ Health Perspect. 1998 Aug;106 Suppl 4:1047-50.; Danaee H. et al. Oncogene. 2002 Jul 25;21(32):4894-9.; Andrew AS. et al. Int J

Cancer. 2004 Apr 20;109(4):581-6.

Additional researchers:

Alan Schned Karl Kelsey Angeline Andrew Carmin Marsit

Study Design:

ΑII

**Matching factors:** 

Follow up of cases?

Country: USA

Population-based Case-Control ICD-0-3 morphology codes:

None

Expected time of follow-up?

Yes 5-15 years or longer

|                                   | Cases             | Controls             |
|-----------------------------------|-------------------|----------------------|
| Years of enrollment               | 1994-2001         | 1994-2001            |
| Source population                 | New Hampshire USA | New Hampshire<br>USA |
| Response rate (enrolled/eligible) | 85%               | 70%                  |
| Total number enrolled             | 847               | 1091                 |
| Subjects with DNA                 | 728               | 995                  |
| Ethnic origin                     | >90% White, Non-  |                      |
|                                   | Hispanic          |                      |
| Age: mean (range)                 | 62                | 61                   |
| Gender: % males                   | 84%               | 76%                  |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | X     | X        |
| Active smoking  | X     | X        |
| Passive smoking   | X     | Х        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | X     | X        |
| Water chlorination byproducts                             | X     | X        |
| Arsenic exposure  | X     | X        |
| Other environmental exposures                             | X     | X        |
| Hair dye use  | X     | X        |
| Drug use  | X     | X        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake   | X     | X        |
| Fluid intake  | X     | X        |
| Urine pH measurements                                     | -     | -        |
| Other information, please specify                         | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | Х     | Х        |
| Buccal DNA                              | X     | X        |
| Serum/plasma                            | X     | X        |
| Cryopreserved whole blood / lymphocytes | X     | Х        |
| Red blood cells                         | X     | Х        |
| Urine samples                           | -     | X        |
| Toenail clippings                       | X     | X        |

| Others, please specify | - | - |
|------------------------|---|---|
| Paraffin tissue blocks | Х |   |
| Frozen tissue          | - |   |

| Information at time of diagnosis                   |   |
|--|---|
| Histological confirmation                          | Х |
| Number of tumors                                   | X |
| Tumor site   | X |
| Tumor size   | X |
| Tumor grade  | X |
| Growth pattern                                     | X |
| Treatment of primary tumor                         | X |
| Stage  | X |
| Other information, please specify % of tumor       | X |
| Follow-up information                              |   |
| Treatment information                              | Х |
| Tumor recurrence                                   | x |
| Tumor progression                                  | X |
| Survival   | x |
| Histological confirmation                          | X |
| Number of tumors                                   | x |
| Tumor site   | X |
| Tumor size   | X |
| Tumor grade  | X |
| Growth pattern                                     | - |
| Stage  | X |
| Active smoking                                     | X |
| Occupational exposures                             | - |
| Drug use   | X |
| Medical History                                    | X |
| Quality of life                                    | - |
| Caffeine intake                                    | - |
| Fluid intake                                       | - |
| Other information, please specify, passive smoking | Х |
|  |   |

Leeds Bladder Cancer Study (Molecular Epidemiology of DNA repair and Bladder Cancer)

Institution: Gray Institute for Radiation Oncology and Biology

**Principal Investigators:** 

Dr. Anne E. Kiltie

**Key References:** 

Sak SC, Barrett J, Paul A, Bishop DT, Kiltie AE (2005) British Journal of Cancer 92:2262-2265. Sak SC, Barrett JH, Paul AB, Bishop DT, Kiltie AE (2006) Cancer Epidemiology Biomarkers and Prevention 15:2537-41. **Institution address:** Old Road Campus Research Building Off Roosevelt Drive, OXFORD OX3 7DQ

Additional researchers:

D Tim Bishop, CR-UK Jennifer H Barrett, CR-UK Sei Chung Sak, now NHS Alan B Paul, NHS

Study Design: Matching factors: Country:

Hospital-based case control Age and gender UK

ICD-0-3 morphology codes: Follow up of cases? Yes Expected time of follow-up?
81203 Currently 3-5 years

Currently 5-5

|                                   | Cases           | Controls        |
|-----------------------------------|-----------------|-----------------|
| Years of enrollment               | 2002-ongoing    | 2002-2004       |
| Source population                 | County of West  | County of West  |
|                                   | Yorkshire UK    | Yorkshire UK    |
| Response rate (enrolled/eligible) | 900/1100        | Approx 80%      |
| Total number enrolled             | 1100            | 900             |
| Subjects with DNA                 | 1100            | 900             |
| Ethnic origin                     | 98.5% Caucasian | 98.5% Caucasian |
| Age: mean (range)                 | 72.8 years      | 71.9 years      |
| Gender: % males                   | 71%             | 65%             |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | Х        |
| Active smoking  | X     | X        |
| Passive smoking   | -     | -        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | X     | X        |
| Water chlorination byproducts                             | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                             | -     | -        |
| Hair dye use  | -     | -        |
| Drug use  | -     | -        |
| Medical History   | -     | -        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | -     | -        |
| Caffeine intake   | -     | -        |
| Fluid intake  | -     | -        |
| Urine pH measurements                                     | -     | -        |
| Other information, please specify                         | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | X        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | -     | -        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | x     |          |
| Frozen tissue                           | -     |          |

| Information at time of diagnosis                        |        |
|---|--------|
| Information at time of diagnosis                        | v      |
| Histological confirmation  Number of tumors             | X<br>X |
| Tumor site  |        |
| Tumor size  | X      |
|   | X      |
| Tumor grade   | X      |
| Growth pattern  | X      |
| Treatment of primary tumor                              | X      |
| Stage Other information, places enecify                 | Х      |
| Other information, please specify Follow-up information | -      |
| Treatment information                                   | X      |
| Tumor recurrence  | X<br>X |
|   | X      |
| Tumor progression<br>Survival                           | X      |
| Histological confirmation                               | X      |
| Number of tumors  |        |
| Tumor site  | X<br>X |
| Tumor size  |        |
| Tumor grade   | X<br>X |
| Growth pattern  |        |
|   | X      |
| Stage Active emoking                                    | X<br>X |
| Active smoking  |        |
| Occupational exposures                                  | X      |
| Drug use  | X      |
| Medical History   | Х      |
| Quality of life<br>Caffeine intake                      | -      |
| Fluid intake  | -      |
|   | -      |
| Other information, please specify                       | -      |

Torino bladder cancer

Institution:

Dipartimento di Scienze Biomediche e Oncologia

Umana

**Principal Investigators:** 

Giuseppe Matullo Paolo Vineis **Key References**: Institution address:

Via Santena 7 10126 Torino Italy

Additional researchers:

Carlotta Sacerdote

Study Design:

Hospital-based Case-Control

**Matching factors:** 

Country: Italy

ICD-0-3 morphology codes:

phology codes: Follow up of cases? Yes

Expected time of follow-up? 15/07/2007

81203, 81303, 80703, 81403, 81402

Urinary Bladder ICD-0-3 morphology codes: Transitional cell carcinoma (81203); Papillary carcinoma (81303); Squamous cell carcinoma (80703); Adenocarcinoma (81403); Leiomyosarcoma (88903)

|                                   | Cases               | Controls            |
|-----------------------------------|---------------------|---------------------|
| Years of enrollment               | 1994-2007           | 1994-2007           |
| Source population                 | Torino metropolitan | Torino metropolitan |
|                                   | area                | area                |
| Response rate (enrolled/eligible) |                     |                     |
| Total number enrolled             | 439                 | 512                 |
| Subjects with DNA                 | 422                 | 414                 |
| Ethnic origin                     | 100% Italian        |                     |
|                                   | Caucasian           |                     |
| Age: mean (range)                 | 57.3 (42-74)        | 57.3 (40-74)        |
| Gender: % males                   | 100%                | 100%                |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | Х        |
| Active smoking  | X     | X        |
| Passive smoking   | X     | X        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | -     | -        |
| Water chlorination byproducts                             | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                             | -     | -        |
| Hair dye use  | -     | -        |
| Drug use  | X     | X        |
| Medical History   | -     | -        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake   | X     | X        |
| Fluid intake  | X     | X        |
| Urine pH measurements                                     | -     | -        |
| Other information, please specify                         | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | X        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | X     | Х        |
| Cryopreserved whole blood / lymphocytes | X     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | X     | Х        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | -     |          |
| Frozen tissue                           | -     |          |

| Histological confirmation  | Х |
|--|---|
| Number of tumors   | - |
| Tumor site   | Х |
| Tumor size   | Х |
| Tumor grade  | Х |
| Growth pattern   | - |
| Treatment of primary tumor   | Х |
| Stage  | - |
| Other information, please specify Morphology                       | Х |
| Follow-up information  |   |
| Treatment information  | - |
| Tumor recurrence   | - |
| Tumor progression  | - |
| Survival   | X |
| Histological confirmation  | - |
| Number of tumors   | - |
| Tumor site   | - |
| Tumor size   | - |
| Tumor grade  | - |
| Growth pattern   | - |
| Stage  | - |
| Active smoking   | - |
| Occupational exposures   | - |
| Drug use   | - |
| Medical History  | - |
| Quality of life  | - |
| Caffeine intake  | - |
| Fluid intake<br>Other information , please specify: Cause of death | - |

Molecular Epidemiology of Bladder Cancer and Prostate Cancer

**Principal Investigators:** 

Zuo-Feng Zhang

Institution:

University of California in Los Angeles (UCLA)

Institution address:

UCLA Center for Environmental Genomics UCLA School of Public Health 71-225 CHS, Box 951772 650 Charles Young Drive, South Los Angeles, CA 90095-1772 310-825-8418 (Office)

**Key References:** 

Study Design:

Hospital-based Case-control

ICD-0-3 morphology codes:

81203, 81303, 80703, 81403

Cao W, et al. Cancer. 2005 Dec 1;104(11):2400-8. Hung RJ, J Urol . 2006 Sep;176(3):1192-7.

Yang YC, et al.Br J Cancer. 2006 Dec 4;95(11):1455-8.

Additional researchers:

Matching factors: Country: Un-matched U.S.A.

Follow up of cases? Expected time of follow-up?

es 60-120 months

|                                   | Cases           | Controls        |
|-----------------------------------|-----------------|-----------------|
| Years of enrollment               | 1993-1997       | 1993-1997       |
| Source population                 | MSKCC, hospital | MSKCC, hospital |
| Response rate (enrolled/eligible) | 94.6%           | 91.9%           |
| Total number enrolled             | 229             | 204             |
| Subjects with DNA                 | 170             | 158             |
| Ethnic origin                     | 97.1% Caucasian | 97.5% Caucasian |
| Age: mean (range)                 | 64.9            | 42.2            |
| Gender: % males                   | 82.9%           | 76.6%           |

| Questionnaire data  | Cases       | Controls    |
|---|-------------|-------------|
| Demographics (age, sex, ethnicity, region, education etc)               | X           | X           |
| Active smoking  | X           | X           |
| Passive smoking (only for non smokers-ex smokers)                       | X           | X           |
| Occupational exposures  | X           | X           |
| Residential history   | X           | X           |
| Water chlorination byproducts   |             |             |
| Arsenic exposure  | X           | X           |
| Other environmental exposures   | X           | X           |
| Hair dye use (available after follow up)                                | X           | Х           |
| Drug use (available after follow up)                                    |             |             |
| Medical History (available after follow up)                             | X           | X           |
| Family History  | X           | X           |
| Quality of life   |             |             |
| Diet/nutrition  | X           | X           |
| Caffeine intake   | X           | X           |
| Fluid intake  | X           | X           |
| Urine pH measurements   |             |             |
| Other information, please specify (alcohol, tea, soft drinks; diuresis) | Alcohol,    | Alcohol,    |
|   | physical    | physical    |
|   | activities, | activities, |
|   | pain        | pain        |
|   | relievers,  | relievers,  |
|   | etc         | etc         |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | X        |
| Buccal DNA                              |       |          |
| Serum/plasma                            | X     | X        |
| Cryopreserved whole blood / lymphocytes |       |          |
| Red blood cells                         | X     | X        |

Urine samples Toenail clippings Others, please specify Paraffin tissue blocks Frozen tissue

#### For Cases Only

| Information at time of diagnosis             |   |
|--|---|
| Histological confirmation                    | X |
| Number of tumors (available after follow up) | X |
| Tumor site                                   | X |
| Tumor size                                   | X |
| Tumor grade                                  | X |
| Growth pattern                               |   |
| Treatment of primary tumor                   |   |
| Stage  |   |
| Other information, please specify            |   |
| Follow-up information                        |   |
| Treatment information                        |   |
| Tumor recurrence                             |   |
| Tumor progression                            |   |

Survival Histological confirmation Number of tumors Tumor site Tumor size

Tumor size
Tumor grade
Growth pattern
Stage
Active smoking
Occupational exposures
Drug use
Medical History
Quality of life
Caffeine intake
Fluid intake Fluid intake

Other information, please specify (as above)

X

X

Lutherstadt Wittenberg Bladder Cancer Study (LWBCS)

Institution:

Leibniz Research Centre for Working Environment and Human Factors (IfADo)

**Principal Investigators:** 

IfADo: Klaus Golka, Jan G. Hengstler

Institution address:

IfADo Ardeystr. 67 44139 Dortmund Germany

Tel: +49 231 1084 344 Fax: +49 231 1084 308

**Key References:** 

Golka K. et al: J. *Toxicol. Environ. Health Part A* 2008 71:881-6

Zimmermann A. et al: J. *Toxicol. Environ. Health Part A* 2008 71:911-4

Additional researchers:

Silvia Selinski, IfADo Meinolf Blaszkewicz, IfADo Matthias Hermes, IfADO

Study Design:

Hospital based Case-Control ICD-0-3 morphology codes:

Transitional cell carcinoma (according to ICD 10)

Matching factors:Country:Gender, age, hospitalGermany

Follow up of cases? Yes Expected time of follow-up?

At least 114 months

|                                   | Cases             | Controls          |
|-----------------------------------|-------------------|-------------------|
| Years of enrollment               | Dec 1995-Jan 1999 | Jul 2000-Apr 2005 |
| Source population                 | 1 hospital        | 1 hospital        |
| Response rate (enrolled/eligible) |                   |                   |
| Total number enrolled             |                   |                   |
| Subjects with DNA                 | 216               | 211               |
| Ethnic origin                     | German            | German            |
| Age: mean (range)                 | 67 (20-93)        | 67 (29-91)        |
| Gender: % males                   | 186               | 175               |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, etc)                         | X     | X        |
| Active smoking  | X     | X        |
| Passive smoking (only for non smokers-ex smokers)                       | -     | -        |
| Occupational exposures  | X     | X        |
| Residential history   | -     | -        |
| Water chlorination byproducts   | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures   | -     | -        |
| Hair dye use  | -     | -        |
| Drug use (available for pain killers only)                              | X     | X        |
| Medical History   | -     | -        |
| Family History (related to bladder cancer)                              | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | -     | -        |
| Caffeine intake   | -     | -        |
| Fluid intake  | -     | -        |
| Urine pH measurements   | -     | -        |
| Other information, please specify (alcohol, tea, soft drinks; diuresis) |       |          |

| Biological Samples | Cases | Controls |
|--------------------|-------|----------|
| Blood DNA          | X     | X        |
| Buccal DNA         | -     | -        |
| Serum/plasma       | -     | -        |

| Cryopreserved whole blood / lymphocytes | -        | - |
|---|----------|---|
| Red blood cells                         | -        | - |
| Urine samples                           | -        | - |
| Toenail clippings                       | -        | - |
| Others, please specify                  | -        | - |
| Paraffin tissue blocks                  | Asked    |   |
| Frozen tissue                           | <u>-</u> |   |

| Information at time of diagnosis              |   |
|---|---|
| Histological confirmation                     | X |
| Number of tumors (available after follow up)  | - |
| Tumor site                                    | - |
| Tumor size                                    | - |
| Tumor grade                                   | X |
| Growth pattern                                | - |
| Treatment of primary tumor                    | X |
| Stage   | X |
| Other information, please specify             |   |
| Follow-up information                         |   |
| Treatment information                         | X |
| Tumor recurrence (available after follow up)  | X |
| Tumor progression (available after follow up) | X |
| Survival (available after follow up)          | X |
| Histological confirmation                     | X |
| Number of tumors                              | - |
| Tumor site                                    | - |
| Tumor size                                    | - |
| Tumor grade                                   | X |
| Growth pattern                                | - |
| Stage   | X |
| Active smoking                                | - |
| Occupational exposures                        | - |
| Drug use                                      | - |
| Medical History                               | - |
| Quality of life                               | - |
| Caffeine intake                               | - |
| Fluid intake                                  | - |
| Other information, please specify (as above)  | - |
|   |   |

Eastern European Bladder Cancer Study

**Principal Investigators:** 

Tony Fletcher

**Key References:** 

Institution:

PEHRU Public and Environmental Health Research Unit London School of Hygiene & Tropical Medicine

Institution address:

PEHRU Public and Environmental Health Research Unit, London School of Hygiene & Tropical Medicine, Keppel Street, London WC1E 7HT, UK

Additional researchers:

Study Design: **Matching factors:** Country:

Hospital-based case control Age, gender Hungary, Romania, Slovakia ICD-0-3 morphology codes: Follow up of cases? Expected time of follow-up?

Urinary Bladder ICD-0-3 morphology codes: Transitional cell carcinoma (81203); Papillary carcinoma (81303); Squamous cell carcinoma (80703); Adenocarcinoma (81403); Leiomyosarcoma (88903)

|                                   | Cases                         | Controls                         |
|-----------------------------------|-------------------------------|----------------------------------|
| Years of enrollment               | 2002-2004                     | 2002-2004                        |
| Source population                 | Hungary, Romania and Slovakia | Hungary, Romania<br>and Slovakia |
| Response rate (enrolled/eligible) | 85.3%                         |                                  |
| Total number enrolled             | 214                           | 540                              |
| Subjects with DNA                 | 214                           | 540                              |
| Ethnic origin                     | Caucasian                     | Caucasian                        |
| Age: mean (range)                 | 30-79                         | 30-79                            |
| Gender: % males                   |                               |                                  |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | X        |
| Active smoking  | X     | X        |
| Passive smoking   | X     | X        |
| Occupational exposures                                    | X     | X        |
| Residential history Water chlorination byproducts         | Х     | Х        |
| Arsenic exposure Other environmental exposures            | х     | Х        |
| Hair dye use  |       |          |
| Drug use  | Х     | X        |
| Medical History   | Х     | X        |
| Family History<br>Quality of life                         | Х     | X        |
| Diet/nutrition  | x     | x        |
| Caffeine intake   | Х     | X        |
| Fluid intake<br>Urine pH measurements                     | X     | X        |
| Other information, please specify                         | х     | X        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | х     | Х        |
| Buccal DNA                              | X     | X        |
| Serum/plasma                            |       |          |
| Cryopreserved whole blood / lymphocytes |       |          |
| Pad blood colls                         |       |          |

Red blood cells Urine samples Toenail clippings Others, please specify Paraffin tissue blocks

Frozen tissue

| Information at time of diagnosis  |   |
|-----------------------------------|---|
| Histological confirmation         | Χ |
| Number of tumors                  |   |
| Tumor site                        |   |
| Tumor size                        |   |
| Tumor grade                       | Χ |
| Growth pattern                    |   |
| Treatment of primary tumor        |   |
| Stage                             |   |
| Other information, please specify |   |
| Follow-up information             |   |

Treatment information Tumor recurrence
Tumor progression
Survival
Histological confirmation
Number of tumors

Number of tumors
Tumor site
Tumor size
Tumor grade
Growth pattern
Stage
Active smoking
Occupational exposures
Drug use
Medical History
Quality of life
Caffeine intake

Caffeine intake

Fluid intake

Other information , please specify

Brescia bladder cancer case-control study

Institution:

Institute of Occupational Health, University of Brescia,

**Principal Investigators:** 

Stefano Porru

Institution address:

P.le Spedali Civili, 1 25125 Brescia - Italy

**Key References:** 

Hung RJ. et al. Carcinogenesis. 2004 Jun;25(6):973-8. Hung RJ. et al. Int J Cancer. 2004 Jul 1;110(4):598-604.

Hung RJ. et al. Cancer Epidemiol Biomarkers Prev. 2004

Jun;13(6):1013-21.

Additional researchers:

Cecilia Arici, Marcello Campagna, Angela Carta, Donatella Placidi, Antonio Scotto di Carlo

Study Design: Hospital-based case

control

ICD-0-3 morphology codes: 8010/2, 8050/3, 8070/3, 8120/2, 8120/3, 8130/2, 8130/3, 8246/3,

8560/3

Matching factors: Age, gender, and hospital of admission

Follow up of cases? Yes (from 2007)

Country: Italy

Expected time of follow-up?

64 -120 months

|                                   | Cases               | Controls            |
|-----------------------------------|---------------------|---------------------|
| Years of enrollment               | 1997-2000           | 1997-2000           |
| Source population                 | Province of Brescia | Province of Brescia |
| Response rate (enrolled/eligible) | 93%                 | 97%                 |
| Total number enrolled             | 216                 | 220                 |
| Subjects with DNA                 | 200                 | 214                 |
| Ethnic origin                     | 100% Caucasian      | 100% Caucasian      |
| Age: mean (range)                 | 63 (22-80)          | 63 (22-79)          |
| Gender: % males                   | 100                 | 100                 |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc)               | Х     | Х        |
| Active smoking  | X     | X        |
| Passive smoking (only for non smokers-ex smokers)                       | X     | X        |
| Occupational exposures  | X     | X        |
| Residential history   | X     | X        |
| Water chlorination byproducts   | X     | X        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures   | X     | X        |
| Hair dye use (available after follow up)                                | X     | -        |
| Drug use (available after follow up)                                    | X     | -        |
| Medical History (available after follow up)                             | X     | -        |
| Family History  | -     | -        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake   | X     | X        |
| Fluid intake  | X     | X        |
| Urine pH measurements   | -     | -        |
| Other information, please specify (alcohol, tea, soft drinks; diuresis) | X     | X        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | X        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | X     | Х        |
| Cryopreserved whole blood / lymphocytes | X     | X        |
| Red blood cells                         | X     | Х        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | -     |          |

Frozen tissue

| Information at time of discussion            |   |
|--|---|
| Information at time of diagnosis             |   |
| Histological confirmation                    | X |
| Number of tumors (available after follow up) | X |
| Tumor site                                   | Х |
| Tumor size                                   | - |
| Tumor grade                                  | X |
| Growth pattern                               | Х |
| Treatment of primary tumor                   | X |
| Stage  | X |
| Other information, please specify            | - |
| Follow-up information                        |   |
| Treatment information                        | Х |
| Tumor recurrence                             | Х |
| Tumor progression                            | Х |
| Survival                                     | X |
| Histological confirmation                    | X |
| Number of tumors                             | X |
| Tumor site                                   | X |
| Tumor size                                   | X |
| Tumor grade                                  | X |
| Growth pattern                               | X |
| Stage  | X |
| Active smoking                               | X |
| Occupational exposures                       | X |
| Drug use                                     | X |
| Medical History                              | X |
| Quality of life                              | - |
| Caffeine intake                              | X |
| Fluid intake                                 | X |
| Other information, please specify (as above) | X |
|  |   |

The Belgian case control study on bladder cancer

Institution:

Acad. Huisartsgeneeskunde, Catholic University of Leuven

(KUL), Belgium

Comprehensive Cancer Institute Limburg, Belgium

**Principal Investigators:** 

Maurice Zeegers Frank Buntinx Institution address:

Acad.Huisartsgeneeskunde, KUL Kapucijnenvoer 33 Blok J

3000 Leuven Belgium

Tel 32/(0)16 33 74 93

**Key References:** 

Kellen E., et al. *Int J Cancer*. 2006 May 15;118(10):2572-8., Kellen E., et al.. *Int J Urol*. 2006 Sep;13(9):1180-4., Kellen E., et al.. *Cancer Lett*. 2007 Jan 8;245(1-2):51-60

Additional researchers:

Eliane Kellen

Study Design: Population-based case control Matching factors: None Country: Belgium

ICD-0-3 morphology codes: 81203 Follow up of cases? No Expected time of follow-up? N.A.

Urinary Bladder ICD-0-3 morphology codes: Transitional cell carcinoma (81203); Papillary carcinoma (81303); Squamous cell carcinoma (80703); Adenocarcinoma (81403); Leiomyosarcoma (88903)

|                                   | Cases           | Controls       |
|-----------------------------------|-----------------|----------------|
| Years of enrollment               | 2003-2005       | 2003-2005      |
| Source population                 | Cancer registry | Population     |
| Response rate (enrolled/eligible) | Not known       | 26%            |
| Total number enrolled             | 200             | 386            |
| Subjects with DNA                 | 200             | 386            |
| Ethnic origin                     | 100% Caucasian  | 100% Caucasian |
| Age: mean (range)                 | 67.67           | 64.24          |
| Gender: % males                   | 86              | 59             |

| Questionnaire data   | Cases | Controls |
|--|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc.) | Х     | Х        |
| Active smoking   | X     | X        |
| Passive smoking  | -     | -        |
| Occupational exposures                                     | X     | X        |
| Residential history  | X     | X        |
| Water chlorination byproducts                              | -     | -        |
| Arsenic exposure   | X     | X        |
| Other environmental exposures                              | X     | X        |
| Hair dye use   | -     | -        |
| Drug use   | -     | -        |
| Medical History  | X     | X        |
| Family History   | X     | X        |
| Quality of life  | -     | -        |
| Diet/nutrition   | X     | X        |
| Caffeine intake  | X     | X        |
| Fluid intake   | X     | X        |
| Urine pH measurements                                      | -     | -        |
| Other information, please specify                          | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | X     | Х        |
| Buccal DNA                              | X     | Х        |
| Serum/plasma                            | x     | -        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | -     | -        |
| Others, please specify                  | -     |          |
| Paraffin tissue blocks                  | -     |          |

| Information at time of diagnosis   |   |
|------------------------------------|---|
| Histological confirmation          | X |
| Number of tumors                   | - |
| Tumor site                         | X |
| Tumor size                         | - |
| Tumor grade                        | - |
| Growth pattern                     | - |
| Treatment of primary tumor         | - |
| Stage                              | - |
| Other information, please specify  | - |
| Follow-up information              |   |
| Treatment information              | - |
| Tumor recurrence                   | - |
| Tumor progression                  | - |
| Survival                           | - |
| Histological confirmation          | - |
| Number of tumors                   | - |
| Tumor site                         | - |
| Tumor size                         | - |
| Tumor grade                        | - |
| Growth pattern                     | - |
| Stage                              | - |
| Active smoking                     | - |
| Occupational exposures             | - |
| Drug use                           | - |
| Medical History                    | - |
| Quality of life                    | - |
| Caffeine intake                    | - |
| Fluid intake                       | - |
| Other information , please specify | - |
|                                    |   |

Study Name: Institution:

French Bladder Cancer Study (FBCS) INSERM U794 and CNRS FRE2939

Institut Gustave Roussy, Villejuif France

**Principal Investigators:** 

INSERM/CNRS: Simone Benhamou, Alain Sarasin

Institution address: INSERMU794/CNRS FRE2939

Institut Gustave Roussy Espace Maurice Tubina (-1) 94805 Villejuif, France

DBS: Agnès Laplanche Department of Biostatistics and Epidemiology (DBS)

Institut Gustave Roussy Rue Camille Desmoulins, 94805 Villejuif cedex, France

**Key References:** 

Benhamou S. et al. Mutagenesis. 2003 Sep;18(5):445-8

Additional researchers:

Stefan Michiels (DBS) Thomas Boulet (DBS) Philippe Dessen (CNRS)

Study Design: Hospital-based case control Ma

Matching factors: Age, gender and

hospital

ICD-0-3 morphology codes: 81203 Follow up of cases: (but not for all cases)

Follow up of cases: Yes Expected time of follow-

up: 60 months

Country: France

|                                   | Cases               | Controls            |
|-----------------------------------|---------------------|---------------------|
| Years of enrollment               | 1997-2001           | 1997-2001           |
| Source population                 | 3 general hospitals | 3 general hospitals |
|                                   | in Paris            | in Paris            |
| Response rate (enrolled/eligible) | 95%                 | 95%                 |
| Total number enrolled             | 201                 | 322                 |
| Subjects with DNA                 | 195                 | 320                 |
| Ethnic origin                     | 100% Caucasian      | 100% Caucasian      |
| Age: mean (range)                 | 66 (30-89)          | 67 (34-92)          |
| Gender: % males                   | 84%                 | 85%                 |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc) | Х     | X        |
| Active smoking  | X     | X        |
| Passive smoking   | -     | -        |
| Occupational exposures                                    | X     | X        |
| Residential history                                       | -     | -        |
| Water chlorination byproducts                             | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                             | -     | -        |
| Hair dye use  | -     | -        |
| Drug use  | -     | -        |
| Medical History   | -     | -        |
| Family History  | -     | -        |
| Quality of life   | -     | -        |
| Diet/nutrition  | -     | -        |
| Caffeine intake   | X     | X        |
| Fluid intake  | -     | -        |
| Urine pH measurements                                     | -     | -        |
| Other information, please specify                         | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | Х     | Х        |
| Buccal DNA                              | -     | -        |
| Serum/plasma                            | -     | -        |
| Cryopreserved whole blood / lymphocytes | -     | -        |

| Red blood cells        | - |  |
|------------------------|---|--|
| Urine samples          | - |  |
| Toenail clippings      | - |  |
| Others, please specify | - |  |
| Paraffin tissue blocks | Χ |  |
| Frozen tissue          | - |  |
|                        |   |  |

| Information at time of diagnosis  |   |
|-----------------------------------|---|
| Histological confirmation         | X |
| Number of tumors                  | X |
| Tumor site                        | - |
| Tumor size                        | Х |
| Tumor grade                       | x |
| Growth pattern                    | - |
| Treatment of primary tumor        | Х |
| Stage                             | x |
| Other information, please specify | - |
| Follow-up information             |   |
| Treatment information             | X |
| Tumor recurrence                  | x |
| Tumor progression                 | X |
| Survival                          | X |
| Histological confirmation         | Х |
| Number of tumors                  | - |
| Tumor site                        | - |
| Tumor size                        | - |
| Tumor grade                       | X |
| Growth pattern                    | - |
| Stage                             | Х |
| Active smoking                    | - |
| Occupational exposures            | - |
| Drug use                          | - |
| Medical History                   | - |
| Quality of life Caffeine intake   | - |
| Fluid intake                      | - |
| Other information, please specify | _ |
| Other information, piease specify | - |

The South and East China case control study on Bladder

Cancer. SEarCh

**Principal Investigators:** 

Maurice Zeegers

**Key References:** 

Institution:

Department of Public Health and Epidemiology University of Birmingham, UK

Institution address:

Unit of Genetic Epidemiology

Department of Public Health and Epidemiology University of Birmingham, Public Health Building Edgbaston, Birmingham, B15 2TT England

Additional researchers:

Marjolein Hemelt

Study Design: Matching factors:

Hospital-based case control

Frequency matched on age, sex,

hospital

ICD-0-3 morphology codes: Follow up of cases?

801203, 81303, 80703 No

Country: China

Expected time of follow-up?

Urinary Bladder ICD-0-3 morphology codes: Transitional cell carcinoma (81203); Papillary carcinoma (81303); Squamous cell carcinoma (80703); Adenocarcinoma (81403); Leiomyosarcoma (88903)

|                                   | Cases                   | Controls         |
|-----------------------------------|-------------------------|------------------|
| Years of enrollment               | 2005-continuing         | 2005-continuing  |
| Source population                 | 4 hospitals in 4 cities | 4 hospitals in 4 |
|                                   | in China                | cities in China  |
| Response rate (enrolled/eligible) | 95%                     | 95%              |
| Total number enrolled             | 225/yr                  | 225/yr           |
| Subjects with DNA                 | 95%                     | 95%              |
| Ethnic origin                     | Asian                   | Asian            |
| Age: mean (range)                 | 70, 30-93               | 70, 30-93        |
| Gender: % males                   | 80%                     | 80%              |

| Questionnaire data  | Cases | Controls |
|---|-------|----------|
| Demographics (age, sex, ethnicity, region, education etc)     | Х     | Х        |
| Active smoking  | X     | X        |
| Passive smoking   | X     | X        |
| Occupational exposures  | X     | X        |
| Residential history   | -     | -        |
| Water chlorination byproducts                                 | -     | -        |
| Arsenic exposure  | -     | -        |
| Other environmental exposures                                 | -     | -        |
| Hair dye use  | X     | X        |
| Drug use  | X     | X        |
| Medical History   | X     | X        |
| Family History  | X     | X        |
| Quality of life   | -     | -        |
| Diet/nutrition  | X     | X        |
| Caffeine intake   | X     | X        |
| Fluid intake  | X     | X        |
| Urine pH measurements   | -     | -        |
| Other information, please specify: Hairdye, physical activity | -     | -        |

| Biological Samples                      | Cases | Controls |
|---|-------|----------|
| Blood DNA                               | -     | -        |
| Buccal DNA                              | X     | Х        |
| Serum/plasma                            | -     | -        |
| Cryopreserved whole blood / lymphocytes | -     | -        |
| Red blood cells                         | -     | -        |
| Urine samples                           | -     | -        |
| Toenail clippings                       | X     | Х        |
| Others, please specify                  | -     | -        |
| Paraffin tissue blocks                  | -     |          |
| Frozen tissue                           | -     |          |

| Information at time of diagnosis  |          |
|-----------------------------------|----------|
| Histological confirmation         | X        |
| Number of tumors                  | -        |
| Tumor site                        | X        |
| Tumor size                        | -        |
| Tumor grade                       | X        |
| Growth pattern                    | -        |
| Treatment of primary tumor        | -        |
| Stage                             | X        |
| Other information, please specify | <u> </u> |
| Follow-up information             |          |
| Treatment information             | -        |
| Tumor recurrence                  | -        |
| Tumor progression                 | -        |
| Survival                          | -        |
| Histological confirmation         | -        |
| Number of tumors                  | -        |
| Tumor site                        | -        |
| Tumor size                        | -        |
| Tumor grade                       | -        |
| Growth pattern                    | -        |
| Stage                             | -        |
| Active smoking                    | -        |
| Occupational exposures            | -        |
| Drug use                          | -        |
| Medical History                   | -        |
| Quality of life                   | -        |
| Caffeine intake                   | -        |
| Fluid intake                      | -        |
| Other information, please specify | -        |
|                                   |          |