

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines

Kidney Cancer

Version 1.2017 — September 26, 2016

NCCN.org

NCCN Guidelines for Patients® available at www.nccn.org/patie

Continue

Version 1.2017, 09/26/16 @ National Comprehensive Cancer Network, Inc. 2016, All rights reserved. The NCCN Guidelines® and this illustration may not be reproduced in any form without the express written permission of NCCN®





NCCN Guidelines Version 1.2017 Panel Members Kidney Cancer

* Robert J. Motzer, MD/Chair † Þ Memorial Sloan Kettering Cancer Center

Eric Jonasch, MD/Vice-chair †
* The University of Texas
MD Anderson Cancer Center

Neeraj Agarwal, MD ‡ † Huntsman Cancer Institute at the University of Utah

Sam Bhayani, MD ω Siteman Cancer Center at Barnes-Jewish Hospital and Washington University School of Medicine

William P. Bro ¥ Kidney Cancer Association

Sam S. Chang, MD ω Vanderbilt-Ingram Cancer Center

Toni K. Choueiri, MD † Þ Dana-Farber/Brigham and Women's Cancer Center

Brian A. Costello, MD, MS † Mayo Clinic Cancer Center

Ithaar H. Derweesh, MD ω UC San Diego Moores Cancer Center

Mayer Fishman, MD, PhD † Þ ‡
Moffitt Cancer Center

NCCN Guidelines Panel Disclosures

Thomas H. Gallagher, MD Þ
Fred Hutchinson Cancer Research Center/
Seattle Cancer Care Alliance

John L. Gore, MD, MS ω
Fred Hutchinson Cancer Research Center/
Seattle Cancer Care Alliance

Steven L. Hancock, MD § Þ Stanford Cancer Institute

Michael R. Harrison, MD † Duke Cancer Institute

Won Kim, MD †
UCSF Helen Diller Family
Comprehensive Cancer Center

Christos Kyriakopoulos, MD ‡ University of Wisconsin Carbone Cancer Center

Chad LaGrange, MD ω Fred & Pamela Buffett Cancer Center

Elaine T. Lam, MD †
University of Colorado Cancer Center

Clayton Lau, MD ω City of Hope Comprehensive Cancer Center

M. Dror Michaelson, MD, PhD †
Massachusetts General Hospital
Cancer Center

Thomas Olencki, DO †
The Ohio State University Comprehensive
Cancer Center - James Cancer Hospital
and Solove Research Institute

Phillip M. Pierorazio, MI The Sidney Kimmel Cor Cancer Center at Johns

Elizabeth R. Plimack, M Fox Chase Cancer Cent

Bruce G. Redman, DO † University of Michigan Comprehensive Cancer

Brian Shuch, MD ω Yale Cancer Center/Smi

Brad Somer, MD † St. Jude Children's Res University of Tennessee

Guru Sonpavde, MD † University of Alabama a Comprehensive Cancer

Jeffrey Sosman, MD ‡ Robert H. Lurie Compre Center of Northwestern

<u>NCCN</u> Mary Dwyer, MS Rashmi Kumar, PhD

Continue

- † Medical oncology
- # Hematology/hematology oncology
- § Radiotherapy/Radiation oncology
- ▶ Internal medicine

Version 1.2017, 09/26/16 © National Comprehensive Cancer Network, Inc. 2016, All rights reserved. The NCCN Guidelines® and this illustration may not be reproduced in any form without the express written permission of NCCN®





NCCN Guidelines Version 1.2017 Table of Contents Kidney Cancer

NCCN Kidney Cancer Panel Members
Summary of the Guidelines Updates

Initial Workup (KID-1)

Primary Treatment and Follow-Up for Stage I-III (KID-1)

Primary Treatment for Stage IV (KID-2)

Relapse and Stage IV Surgically Unresectable Disease

<u>First-Line Therapy and Subsequent Therapy for Predominant Clear Cell Histology</u> (KID-3)

Systemic Therapy for Non-Clear Cell Histology (KID-4)

Principles of Surgery (KID-A)

Follow-up (KID-B)

Predictors of Short Survival Used to Select Patients for Temsirolimus (KID-C)

Staging (ST-1)

Clinical Trials: N the best manage with cancer is in a Participation in cl especially encour

To find clinical tria Member Institutioncen.org/clinical

NCCN Categorie Consensus: All I are category 2A u specified.

See <u>NCCN Cated</u> and <u>Consensus</u>.

The NCCN Guidelines® are a statement of evidence and consensus of the authors regarding their views of currently accepted app. Any clinician seeking to apply or consult the NCCN Guidelines is expected to use independent medical judgment in the context of circumstances to determine any patient's care or treatment. The National Comprehensive Cancer Network® (NCCN®) makes no rewarranties of any kind regarding their content, use or application and disclaims any responsibility for their application or use in an Guidelines are copyrighted by National Comprehensive Cancer Network®. All rights reserved. The NCCN Guidelines and the illust not be reproduced in any form without the express written permission of NCCN. ©2016.

Version 1.2017, 09/26/16 © National Comprehensive Cancer Network, Inc. 2016, All rights reserved. The NCCN Guidelines® and this illustration may not be reproduced in any form without the express written permission of NCCN®





NCCN Guidelines Version 1.2017 Updates Kidney Cancer

Updates in Version 1.2017 of the NCCN Guidelines for Kidney Cancer from Version 3.2016 include:

KID-1

- Initial workup
- ▶ 4th bullet was revised by adding " ±" to "Abdominal ± pelvic CT"
- 5th bullet, chest imaging was clarified as "chest x-ray" and "Chest CT" was added to the "If clinically indicated" bullet
- added to the "If clinically indicated" bullet.

 Footnote "a" was added, "Imaging with contrast when clinically indicated."

 Also added to all KID-B pages.
- Primary treatment
- For Stage I (pT1a), the option for ablative techniques was revised: "Ablative techniques in selected patients for non-surgical candidates"
- For Stage II, III, "Partial nephrectomy, if clinically indicated" was added.

KID-2

- Stage IV
- Primary treatment for potentially surgically resectable primary with multiple metastatic sites was revised: "Cytoreductive nephrectomy in select patients prior to systemic therapy."
- For surgically unresectable, "tissue sampling" was added before first-line therapy.

KID-3

- Predominant clear cell histology
- ▶ First-line therapy
 - The first-line therapy options were reorganized and "alphabetical by category and preference" was added to the heading.
 - ◊ "Preferred" was added to both sunitinib and pazopanib.
- Subsequent therapy
 - The subsequent therapy options were reorganized by removing the "After antiangiogenic therapy" and "after cytokine therapy" categories and adding "Alphabetical by category and preference" to the heading.
 - ♦ "Preferred" was added to cabozantinib (category 1) and nivolumab (category 1)

KID-3 (continued)

- ▶ Subsequent Therapy
 - \Diamond The category designation for the following op
 - Lenvatinib + everolimus was changed from category 1 designation.
 - Everolimus was category 1 after antiangiog cytokine therapy and is now a category 2A.
 - Pazopanib was category 2A after antiangiog category 1 after cytokine therapy and is nov
 Sorafenib was category 2A after antiangiog
 - category 1 after cytokine therapy and is now

 Sunitinib was category 2A after antiangioge
 - Sunitinib was category 2A after antiangioge category 1 after cytokine therapy and is nov
- > The following footnotes were removed from this
 - ♦ "Category 1 recommendations are listed in or
 - "Currently available tyrosine kinase inhibitors therapy include: axitinib, pazopanib, sorafenil

KID-4

- Non-clear cell histology
 - The systemic therapy options were reorganize category and preference" was added to the herapy
 - ♦ "Preferred" was added to sunitinib
 - ♦ Cabozantinib was added with a category 2A d
 - Lenvatinib + everolimus was added with a cat
- ♦ Nivolumab was added with a category 2A desi
- Principles of surgery
- 1st bullet, 1st sub-bullet was revised from "Smal (Patients with T1a and selected T1b and T2a turn Stage I-III tumors where technically feasible."
- 6th bullet, 1st sub-bullet was revised, "Can be conselected patients with clinical stage T1 renal less surgical candidates."

KID-B 1 of 4

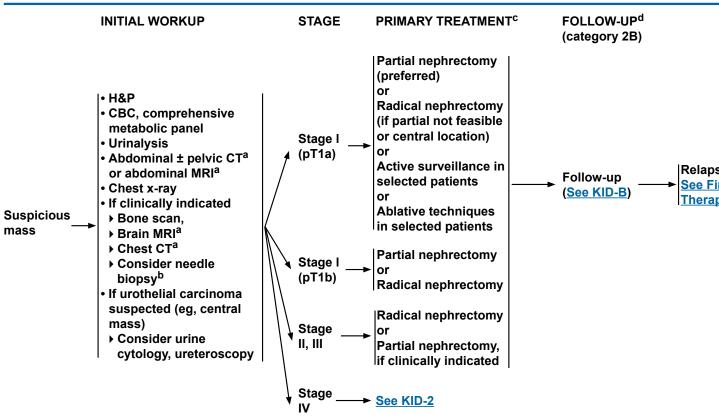
- Follow-up
 - Bullet regarding pelvic imaging was revised, "Pe MRI, as clinically indicated"

Version 1.2017, 09/26/16 © National Comprehensive Cancer Network, Inc. 2016, All rights reserved. The NCCN Guidelines® and this illustration may not be reproduced in any form without the express written permission of NCCN®





NCCN Guidelines Version 1.2017 Kidney Cancer



Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Version 1.2017, 09/26/16 @ National Comprehensive Cancer Network, Inc. 2016, All rights reserved. The NCCN Guidelines@ and this illustration may not be reproduced in any form without the express written permission of NCCN®



almaging with contrast when clinically indicated.

^bBiopsy of small lesions may be considered to obtain or confirm a diagnosis of malignancy and guide surveillance, cryosurgery, and radiofrequ ^cSee Principles of Surgery (KID-A).

dNo single follow-up plan is appropriate for all patients. Follow-up should be individualized based on patient requirements.

DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

