

Curriculum Vitae

Associate Professor Peti Thuwajit M.D., Ph.D.

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1. General information

Date of Birth September 30, 1969

Gender Male

Nationality Thai

2. Graduation*

Undergraduate Study

Graduated year	Level of graduation	Faculty	University/ Country
1994	M.D.	Medicine, Ramathibodi Hospital	Mahidol, Thailand
1999	Ph.D (Biochemistry)	Science	Mahidol, Thailand

Post-graduated Study and Training

- Sep.-Dec. 2003: Short course training on "Real time RT-PCR technique for mRNA detection from frozen tissue" at University of Tsukuba, Tsukuba, Ibaraki, Japan, supported by Postgraduate Education Program, Ministry of Education, Thailand
- 2003-2004: Postdoctoral training on "The molecular genetics of mammary carcinogenesis in the rat" with Prof. Micheal N. Gould at McArdle Lab for Cancer Research, University of Wisconsin-Madison, Wisconsin, USA, supported by Postdoctoral Grant of Thailand Research Fund

3. Position and Employment

Apr. 1994-Nov. 2004

Lecturer, Department of Biochemistry, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand

Nov. 2004-Mar. 2008	Assistant Professor, Department of Biochemistry, Faculty of Medicine, Khon Kaen University, Khon Kaen, Thailand
May 2009-Aug. 2017	Assistant Professor, Department of Immunology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand
Aug. 2017-present	Associate Professor, Department of Immunology, Faculty of Medicine Siriraj Hospital, Mahidol University, Bangkok, Thailand
2015-Present	Assistant Dean of Postgraduate Education, Faculty of Medicine Siriraj Hospital, Mahidol University
2016-Present	IRB member CITI Biomedical+GCP certificate - July 2024
2023-Present	Director of Ph.D. in Immunology International Program, Department of Immunology, Faculty of Medicine Siriraj Hospital, Mahidol University

4. Fields of Research Experience

Biochemistry
Molecular biology
Molecular carcinogenesis
Tumor metastasis
Tumor immuno-imaging

5. Publications

- 5.1 Thongkleang T, Thongchot S, Rodponthukwaji K, Luangwattananun P, Tadpetch K, Yenchitsomanus PT, Thuwajit P, Punnakitikashem P, Thuwajit C. Dual Targeting of FAP-Directed Nanoparticles and FR α -Specific CAR-T Cells Induces Additive Anti-Tumor Effects in Triple-Negative Breast Cancer. *Int J Biol Sci.* 2026 Feb 18;22(5):2736-2753.
- 5.2 Phankeaw P, Khanaruksombat S, Numprasit W, Jamjuntra P, Augsornworawat P, Warnnissorn M, Thuwajit P, Thuwajit C. Stromal transcriptomics uncover LIF as a key effector in high tumor budding triple-negative breast cancer. *Sci Rep.* 2025 Nov 25;15(1):45309.
- 5.3 Venkatraman S, Balasubramanian B, Kongpracha P, Yangngam S, Chuangchot N, Khanaruksombat S, Thongchot S, Suntiparpluacha M, Myint KZ, Soodvilai S, Janvilisri T, Jirawatnotai S, Thuwajit P, Thuwajit C, Meller J, Chutipongtanate S, Tohtong R. Identification of Transcriptional Regulators of Immune Evasion Across Cancers: An Alternative Immunotherapeutic Strategy for Cholangiocarcinoma. *Cancers (Basel).* 2024 Dec 17;16(24):4197.

- 5.4 Rodponthukwaji K, Thongchot S, Deureh S, Thongkleang T, Thaweesuvannasak M, Srichan K, Srisawat C, Thuwajit P, Nguyen KT, Tadpetch K, Thuwajit C, Punnakitikashem P. Development of cancer-associated fibroblasts-targeting polymeric nanoparticles loaded with 8-O-methylfusarubin for breast cancer treatment. *Int J Pharm X*. 2024 Oct 17;8:100294.
- 5.5 Thinyakul C, Sakamoto Y, Shimoda M, Liu Y, Thongchot S, Reda O, Nita A, Sakamula R, Sampattavanich S, Maeda A, Chunthaboon P, Nduru D, Niimura M, Kanamori Y, Thuwajit P, Nakayama KI, Guan KL, Satou Y, Thuwajit C, Moroishi T. Hippo pathway in cancer cells induces NCAM1+ α SMA+ fibroblasts to modulate tumor microenvironment. *Commun Biol*. 2024 Oct 17;7(1):1343. doi: 10.1038/s42003-024-07041-4.
- 5.6 Thongchot S, Aksonnam K, Prasopsiri J, Warnnissorn M, Sa-Nguanraksa D, O-Charoenrat P, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Mesothelin- and nucleolin-specific T cells from combined short peptides effectively kill triple-negative breast cancer cells. *BMC Med*. 2024 Sep 18;22(1):400.
- 5.7 Janyasupab P, Singhanat K, Warnnissorn M, Thuwajit P, Surataneer A, Plaimas K, Thuwajit C. Identification of Tumor Budding-Associated Genes in Breast Cancer through Transcriptomic Profiling and Network Diffusion Analysis. *Biomolecules*. 2024 Jul 24;14(8):896.
- 5.8 Seesawad N, Ittichaiwong P, Sudhawiyangkul T, Sawangjai P, Thuwajit P, Boonsakan P, Sripodok S, Veerakanjana K, Charngkaew K, Pongpaibul A, Angkathunyakul N, Hnoohom N, Yuenyong S, Thuwajit C, Wilaiprasitporn T. PseudoCell: Hard Negative Mining as Pseudo Labeling for Deep Learning-Based Centroblast Cell Detection. *IEEE Open J Eng Med Biol*. 2024 May 30;5:514-523.
- 5.9 Jirapongwattana N, Thongchot S, Pongpaibul A, Trakarnsanga A, Quinn J, Thuwajit P, Thuwajit C, Edwards J. The combined tumour-based Fascin/Snail and stromal periostin reveals the effective prognosis prediction in colorectal cancer patients. *PLoS One*. 2024 Jun 27;19(6):e0304666.
- 5.10 Sueangoen N, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Public neoantigens in breast cancer immunotherapy (Review). *Int J Mol Med*. 2024 Jul;54(1):65. doi: 10.3892/ijmm.2024.5388. Epub 2024 Jun 21.
- 5.11 Yuenyong S, Boonsakan P, Sripodok S, Thuwajit P, Charngkaew K, Pongpaibul A, Angkathunyakul N, Hnoohom N, Thuwajit C. Detection of centroblast cells in H&E stained whole slide image based on object detection. *Front Med (Lausanne)*. 2024 Feb 7;11:1303982.
- 5.12 Somboonpatarakun C, Phanthaphol N, Suwanchiwasiri K, Ramwarungkura B, Yuti P, Pongvarin N, Thuwajit P, Junking M, Yenchitsomanus PT. Cytotoxicity of fourth-generation anti-Trop2 CAR-T cells against breast cancer. *Int Immunopharmacol*. 2024 Mar 10;129:111631.
- 5.13 Sueangoen N, Grove H, Chuangchot N, Prasopsiri J, Rungrotmongkol T, Sanachai K, Darai N, Thongchot S, Suriyaphol P, Sa-Nguanraksa D, Thuwajit P,

- Yenchitsomanus PT, Thuwajit C. Stimulating T cell responses against patient-derived breast cancer cells with neoantigen peptide-loaded peripheral blood mononuclear cells. *Cancer Immunol Immunother*. 2024 Feb 13;73(3):43.
- 5.14 Chuangchot N, Jamjuntra P, Yangngam S, Luangwattananun P, Thongchot S, Junking M, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Enhancement of PD-L1-attenuated CAR-T cell function through breast cancer-associated fibroblasts-derived IL-6 signaling via STAT3/AKT pathways. *Breast Cancer Res*. 2023 Jul 21;25(1):86.
- 5.15 Thongchot S, Aksonnam K, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Nucleolin-based targeting strategies in cancer treatment: Focus on cancer immunotherapy (Review). *Int J Mol Med*. 2023 Sep;52(3):81.
- 5.16 Thongchot S, Duangkaew S, Yotchai W, Maungsomboon S, Phimolsarnti R, Asavamongkolkul A, Thuwajit P, Thuwajit C, Chandhanayingyong C. Novel CSF1R-positive tenosynovial giant cell tumor cell lines and their pexidartinib (PLX3397) and sotuletinib (BLZ945)-induced apoptosis. *Hum Cell*. 2022 Dec 2.
- 5.17 Yangngam S, Prasopsiri J, Hatthakarnkul P, Thongchot S, Thuwajit P, Yenchitsomanus PT, Edwards J, Thuwajit C. Cellular localization of nucleolin determines the prognosis in cancers: a meta-analysis. *J Mol Med (Berl)*. 2022 Aug;100(8):1145-1157.
- 5.18 Jirapongwattana N, Thongchot S, Chiraphappaiboon W, Chieochansin T, Sa-Nguanraksa D, Warnnissorn M, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Mesothelin-specific T cell cytotoxicity against triple negative breast cancer is enhanced by 40s ribosomal protein subunit 3-treated self-differentiated dendritic cells. *Oncol Rep*. 2022 Jul;48(1):127.
- 5.19 Amornsopak K, Thongchot S, Thinyakul C, Box C, Hedayat S, Thuwajit P, Eccles SA, Thuwajit C. HMGB1 mediates invasion and PD-L1 expression through RAGE-PI3K/AKT signaling pathway in MDA-MB-231 breast cancer cells. *BMC Cancer*. 2022 May 24;22(1):578.
- 5.20 Thongchot S, Jirapongwattana N, Luangwattananun P, Chiraphappaiboon W, Chuangchot N, Sa-Nguanraksa D, O-Charoenrat P, Thuwajit P, Yenchitsomanus PT, Thuwajit C. Adoptive Transfer of Anti-Nucleolin T Cells Combined with PD-L1 Inhibition against Triple-Negative Breast Cancer. *Mol Cancer Ther*. 2022 May 4;21(5):727-739.
- 5.21 Prachayakul V, Rugivarodom M, Nopjaroonsri P, Cheirsilpa K, Chang A, Kamolhan T, Boonyaarunnate T, Thuwajit C, Thuwajit P. Diagnostic power of DNA methylation markers suggestive of cholangiocarcinoma in ERCP-based brush cytology. *Gastrointest Endosc*. 2022 Jan;95(1):123-130.e1.
- 5.22 Thongchot S, Jamjuntra P, Prasopsiri J, Thuwajit P, Sawasdee N, Pongvarin N, Warnnissorn M, Sa-Nguanraksa D, O-Charoenrat P, Yenchitsomanus PT, Thuwajit C. Establishment and characterization of novel highly aggressive HER2-positive and triple-negative breast cancer cell lines. *Oncol Rep*. 2021 Dec;46(6):254.

- 5.23 Yangngam S, Thongchot S, Vaeteewoottacharn K, Thuwajit P, Hermoso MA, Okada S, Thuwajit C. Intracellular IL-33 Attenuates Extracellular IL-33-induced Cholangiocarcinoma Cell Proliferation and Invasion via NF- κ B and GSK-3 β Pathways. *Anticancer Res.* 2021 Oct;41(10):4917-4928.
- 5.24 Soongsathitanon J, Jamjuntra P, Sumransub N, Yangngam S, De la Fuente M, Landskron G, Thuwajit P, Hermoso MA, Thuwajit C. Crosstalk between Tumor-Infiltrating Immune Cells and Cancer-Associated Fibroblasts in Tumor Growth and Immunosuppression of Breast Cancer. *J Immunol Res.* 2021 Jul 13;2021:8840066.
- 5.25 Thongchot S, Jamjuntra P, Therasakvichya S, Warnnissorn M, Ferraresi A, Thuwajit P, Isidoro C, Thuwajit C. Interleukin-8 released by cancer-associated fibroblasts attenuates the autophagy and promotes the migration of ovarian cancer cells. *Int J Oncol.* 2021 May;58(5):14.
- 5.26 Oo KK, Kamolhan T, Soni A, Thongchot S, Mitrpant C, O-Charoenrat P, Thuwajit C, Thuwajit P. Development of an engineered peptide antagonist against periostin to overcome doxorubicin resistance in breast cancer. *BMC Cancer.* 2021 Jan 14;21(1):65.
- 5.27 Ngamkham J, Thuwajit C, Thuwajit P, Khamwachirapithak P, Lertsuwan K, Charoensawan V, Jitrapakdee S. Overexpression of Pyruvate Carboxylase Is Correlated with Colorectal Cancer Progression and Supports Growth of Invasive Colon Cancer HT-29 Cell Line. *Anticancer Res.* 2020 Nov;40(11):6285-6293.
- 5.28 Thongchot S, Singsuksawat E, Sumransub N, Pongpaibul A, Trakarnsanga A, Thuwajit P, Thuwajit C. Periostin regulates autophagy through integrin α 5 β 1 or α 6 β 4 and an AKT-dependent pathway in colorectal cancer cell migration. *J Cell Mol Med.* 2020 Nov;24(21):12421-12432.
- 5.29 Permpoon U, Khan F, Vadevoo SMP, Gurung S, Gunassekaran GR, Kim MJ, Kim SH, Thuwajit P, Lee B. Inhibition of Tumor Growth against Chemoresistant Cholangiocarcinoma by a Pro-apoptotic Peptide Targeting Interleukin-4 Receptor. *Mol Pharm.* 2020 Nov 2;17(11):4077-4088.
- 5.30 Yangngam S, Thongchot S, Pongpaibul A, Vaeteewoottacharn K, Pinlaor S, Thuwajit P, Okada S, Hermoso MA, Thuwajit C. High level of interleukin-33 in cancer cells and cancer-associated fibroblasts correlates with good prognosis and suppressed migration in cholangiocarcinoma. *J Cancer.* 2020 Sep 23;11(22):6571-6581.
- 5.31 Sonongbua J, Siritungyong S, Thongchot S, Kamolhan T, Utispan K, Thuwajit P, Pongpaibul A, Wongkham S, Thuwajit C. Periostin induces epithelial-to-mesenchymal transition via the integrin α 5 β 1/TWIST-2 axis in cholangiocarcinoma. *Oncol Rep.* 2020 Apr;43(4):1147-1158.
- 5.32 Sumransub N, Jirapongwattana N, Jamjuntra P, Thongchot S, Chieochansin T, Yenchitsomanus PT, Thuwajit P, Warnnissorn M, O-Charoenrat P, Thuwajit C. Breast cancer stem cell RNA-pulsed dendritic cells enhance tumor cell killing by effector T cells. *Oncol Lett.* 2020 Mar;19(3):2422-2430.

- 5.33 Sootichote R, Thuwajit P, Singuksawat E, Warnnissorn M, Yenchitsomanus PT, Ithimakin S, Chantharasamee J, Thuwajit C. Compound A attenuates toll-like receptor 4-mediated paclitaxel resistance in breast cancer and melanoma through suppression of IL-8. *BMC Cancer*. 2018 Feb 27;18(1):231.
- 5.34 Singuksawat E, Thuwajit C, Charngkaew K, Thuwajit P. Increased ETV4 expression correlates with estrogen-enhanced proliferation and invasiveness of cholangiocarcinoma cells. *Cancer Cell Int*. 2018 Feb 20;18:25.
- 5.35 Utaijaratrasmi P, Vaeteewoottacharn K, Tsunematsu T, Jamjantra P, Wongkham S, Pairojkul C, Khuntikeo N, Ishimaru N, Sirivatanauksorn Y, Pongpaibul A, Thuwajit P, Thuwajit C, Kudo Y. The microRNA-15a-PAI-2 axis in cholangiocarcinoma-associated fibroblasts promotes migration of cancer cells. *Mol Cancer*. 2018 Jan 18;17(1):10.
- 5.36 Prachayakul V, Kanchanapermpoon J, Thuwajit C, Boonyaarunnate T, Pongpaibul A, Chobson P, Thuwajit P. DNA methylation markers improve the sensitivity of endoscopic retrograde cholangiopancreatography-based brushing cytology in extrahepatic cholangiocarcinoma. *Technology in Cancer Research & Treatment* 2017, Dec, 16(6), 1252-58.
- 5.37 Saesoo S, Sathornsumetee S, Anekwiang P, Treetidnipa C, Thuwajit P, Bunthot S, Maneeprakorn W, Maurizi L, Hofmann H, Rungsardthong RU, Saengkrit N. Characterization of liposome-containing SPIONs conjugated with anti-CD20 developed as a novel theranostic agent for central nervous system lymphoma. *Colloids Surf B Biointerfaces*. 2017 Nov 8;161:497-507.
- 5.38 Thuwajit C, Ferraresi A, Titone R, Thuwajit P, Isidoro C. The metabolic cross-talk between epithelial cancer cells and stromal fibroblasts in ovarian cancer progression: Autophagy plays a role. *Med Res Rev*. 2017 Sep 19.
- 5.39 Thuwajit C, Thuwajit P, Jamjantra P, Pairojkul C, Wongkham S, Bhudhisawasdi V, Ono J, Ohta S, Fujimoto K, Izuhara K. Clustering of patients with intrahepatic cholangiocarcinoma based on serum periostin may be predictive of prognosis. *Oncol Lett*. 2017 Jul;14(1):623-634.
- 5.40 Amornsupak K, Jamjuntra P, Warnnissorn M, O-Charoenrat P, Sa-Nguanraksa D, Thuwajit P, Eccles SA, Thuwajit C. High ASMA(+) Fibroblasts and Low Cytoplasmic HMGB1(+) Breast Cancer Cells Predict Poor Prognosis. *Clin Breast Cancer*. 2017 Apr 21. pii: S1526-8209(16)30580-8.
- 5.41 In-chon N, Thuwajit C, Thuwajit P. Estrogen activates Cyclooxygenase-2 and CD44 expressions and promotes cholangiocarcinoma cell invasion. *Genomics and Genetics*. 2016; 9(2&3):95-103.
- 5.42 Prachayakul V, Thearavathanasingha P, Thuwajit C, Roytrakul S, Jaresitthikunchai J, Thuwajit P. Plasma Lipidomics as a Tool for Diagnosis of Extrahepatic Cholangiocarcinoma in Biliary Strictures: a Pilot Study. *Asian Pac J Cancer Prev*. 2016;17:4155.
- 5.43 Amornsupak K, Insawang T, Thuwajit P, O-Charoenrat P, Eccles SA, Thuwajit C. Cancer-associated fibroblasts induce high mobility group box 1 and

- contribute to resistance to doxorubicin in breast cancer cells. *BMC Cancer*. 2014 Dec 15;14:955.
- 5.44 Landskron G, De la Fuente M, Thuwajit P, Thuwajit C, Hermoso MA. Chronic inflammation and cytokines in the tumor microenvironment. *J Immunol Res*. 2014;2014:149185.
- 5.45 Sreekanth GP, Chuncharunee A, Sirimontaporn A, Panaampon J, Srisawat C, Morchang A, Malakar S, Thuwajit P, Kooptiwut S, Suttitheptumrong A, Songprakhon P, Noisakran S, Yenchitsomanus PT, Limjindaporn T. Role of ERK1/2 signaling in dengue virus-induced liver injury. *Virus Res*. 2014 Aug 8;188:15-26.
- 5.46 Pelden S, Insawang T, Thuwajit C, Thuwajit P. The trefoil factor 1 (TFF1) protein involved in doxorubicin-induced apoptosis resistance is upregulated by estrogen in breast cancer cells. *Oncol Rep*. 2013 Jul 5;30:1518-26.
- 5.47 Utispan K, Sonongbua J, Thuwajit P, Chau-In S, Pairojkul C, Wongkham S, Thuwajit C. Periostin activates integrin $\alpha 5\beta 1$ through a PI3K/AKT-dependent pathway in invasion of cholangiocarcinoma. *Int J Oncol*. 2012 Sep;41(3):1110-8.
- 5.48 Hunsawong T, Singsuksawat E, In-Chon N, Chawengrattanachot W, Thuwajit C, Sripa B, Paupairoj A, Chau-In S, Thuwajit P. Estrogen is increased in male cholangiocarcinoma patients' serum and stimulates invasion in cholangiocarcinoma cell lines in vitro. *J Cancer Res Clin Oncol*. 2012 Aug;138(8):1311-20.
- 5.49 Daorueang D, Thuwajit P, Roittrakul S, Laha T, Kaewkes S, Endo Y, Thuwajit C. Secreted *Opisthorchis viverrini* glutathione S-transferase regulates cell proliferation through AKT and ERK pathways in cholangiocarcinoma. *Parasitol Int*. 2012 Mar;61(1):155-61.
- 5.50 Utispan K, Thuwajit P, Abiko Y, Charngkaew K, Paupairoj A, Chau-in S, Thuwajit C. Gene expression profiling of cholangiocarcinoma-derived fibroblast reveals alterations related to tumor progression and indicates periostin as a poor prognostic marker. *Mol Cancer*. 2010 Jan 24;9:13.
- 5.51 Chuaysri C, Thuwajit P, Paupairoj A, Chau-In S, Suthiphongchai T, Thuwajit C. Alpha-smooth muscle actin-positive fibroblasts promote biliary cell proliferation and correlate with poor survival in cholangiocarcinoma. *Oncol Rep*. 2009 Apr;21(4):957-69.
- 5.52 Thuwajit P, Chawengrattanachot W, Thuwajit C, Sripa B, Paupairoj A, Chau-In S. Enhanced expression of MUC6 glycoprotein in cholangiocarcinoma tissue from patients in Thailand indicates a prognostic marker for better survival. *J Gastroenterol*. 2008 May;23(5):771-8.
- 5.53 Thuwajit C, Utispan K, Chuaysri C, Thuwajit P. The mitogenic effect of *Opisthorchis viverrini* excretory/secretory product and its activated signal transduction pathways. *Southeast Asian J Trop Med Public Health*. 2007;38(suppl 1):58-65.

- 5.54 Thuwajit P, Chawengrattanachot W, Thuwajit C, Sripa B, May FE, Westley BR, Tepsiri NN, Paupairoj A, Chau-In S. Increased TFF1 trefoil protein expression in *Opisthorchis viverrini*-associated cholangiocarcinoma is important for invasive promotion. *Hepatol Res*. 2007 Apr;37(4):295-304.
- 5.55 Cotroneo MS, Haag JD, Zan Y, Lopez CC, Thuwajit P, Petukhova GV, Camerini-Otero RD, Gendron-Fitzpatrick A, Griep AE, Murphy CJ, Dubielzig RR, Gould MN. Characterizing a rat *Brca2* knockout model. *Oncogene*. 2007 Mar 8;26(11):1626-35. Epub 2006 Sep 11.
- 5.56 Thuwajit C, Thuwajit P, Uchida K, Daorueang D, Kaewkes S, Wongkham S, Miwa M. Gene expression profiling defined pathways correlated with fibroblast cell proliferation induced by *Opisthorchis viverrini* excretory/secretory product. *World J Gastroenterol*. 2006 Jun 14;12(22):3585-92.
- 5.57 Boonla C, Sripa B, Thuwajit P, Cha-On U, Paupairoj A, Miwa M, Wongkham S. MUC1 and MUC5AC mucin expression in liver fluke-associated intrahepatic cholangiocarcinoma. *World J Gastroenterol*. 2005 Aug 28;11(32):4939-46.
- 5.58 Thuwajit C, Thuwajit P, Kaewkes S, Sripa B, Uchida K, Miwa M, Wongkham S. Increased cell proliferation of mouse fibroblast NIH-3T3 in vitro induced by excretory/secretory product(s) from *Opisthorchis viverrini*. *Parasitology*. 2004 Oct;129(Pt 4):455-64.
- 5.59 Sritippayawan S, Sumboonnanonda A, Vasuvattakul S, Keskanokwong T, Sawasdee N, Paemanee A, Thuwajit P, Wilairat P, Nimmannit S, Malasit P, Yenchitsomanus PT. Novel compound heterozygous *SLC4A1* mutations in Thai patients with autosomal recessive distal renal tubular acidosis. *Am J Kidney Dis*. 2004 Jul;44(1):64-70.
- 5.60 Wongkham S, Bhudhisawasdi V, Chau-in S, Boonla C, Muisuk K, Kongkham S, Wongkham C, Boonsiri P, Thuwajit P. Clinical significance of serum total sialic acid in cholangiocarcinoma. *Clin Chim Acta*. 2003 Jan;327(1-2):139-47.
- 5.61 Yenchitsomanus PT, Vasuvattakul S, Kirdpon S, Wasanawatana S, Susaengrat W, Sreethiphayawan S, Chuawatana D, Mingkum S, Sawasdee N, Thuwajit P, Wilairat P, Malasit P, Nimmannit S. Autosomal recessive distal renal tubular acidosis caused by G701D mutation of anion exchanger 1 gene. *Am J Kidney Dis*. 2002 Jul;40(1):21-9.
- 5.62 Vasuvattakul S, Yenchitsomanus PT, Vachuanichsanong P, Thuwajit P, Kaitwatcharachai C, Laosombat V, Malasit P, Wilairat P, Nimmannit S. Autosomal recessive distal renal tubular acidosis associated with Southeast Asian ovalocytosis. *Kidney Int*. 1999 Nov;56(5):1674-82.
- 5.63 Kaitwatcharachai C, Vasuvattakul S, Yenchitsomanus P, Thuwajit P, Malasit P, Chuawatana D, Mingkum S, Halperin ML, Wilairat P, Nimmannit S. Distal renal tubular acidosis and high urine carbon dioxide tension in a patient with southeast Asian ovalocytosis. *Am J Kidney Dis*. 1999 Jun;33(6):1147-52.

6. Other Experiences and Professional Scientific Membership

6.1 2003, 2004	Grant reviewer, BIOTEC, NSTDA, Bangkok, Thailand
6.2 2004-current	Lived-long member of Science Society of Thailand
6.3 2004-current Research	Member of American Association for Cancer
6.4 2021-current Journals	Associate Editor and Reviewer in Frontier Group
6.5 2023-current Reports	Associate Editor and Reviewer in Scientific

7. Awards

7.1 2022	DMSc Awards 2022, Topic: Diagnostic power of DNA methylation markers suggestive of cholangiocarcinoma in ERCP-based brush cytology, Winner in Category Research and Development in Medical Sciences, Awarded by Department of Medical Sciences, Ministry of Public Health, Thailand
7.2 2023	Outstanding Clinical Research Award 2023, Awarded by Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
7.3 2023	Siriraj Honorary Award 2023, Awarded by Faculty of Medicine Siriraj Hospital, Mahidol University, Thailand
7.4 2023	Research Output Award: Very Good, Topic: Precision Nano-drug Delivery System for Central Nervous System Cancer Therapy, Awarded by National Research Council of Thailand (NRCT), Office of the Ministry of Higher Education, Science, Research and Innovation
7.5 2025	Certified as Senior Fellow of Advance Higher Education (SFHEA), Advance HE, United Kingdom, Fellowship reference PR300856, since 28/03/2025
