

Understanding Oncology Dynamics in Japan

1. Overview of Japan's Cancer Care System

Japan's cancer care framework is distinct from the U.S. in its **organ-specific specialization**. Rather than a general medical oncologist overseeing a patient's chemotherapy for all tumor types (as is common in the U.S.), in Japan the **primary treating physician is often a specialist of the organ in which the cancer originated**. In practice, this means that a patient with lung cancer might be managed by a thoracic surgeon or pulmonologist, a breast cancer patient by a breast surgeon, and so on. These organ-specific experts not only perform surgeries but *also* frequently direct systemic therapies (like chemotherapy) and coordinate radiation for their patients. This tradition evolved historically because dedicated medical oncology as a standalone specialty was virtually nonexistent in Japan until recently. The result is a care model where the surgeon or organ-focused physician "takes care of the patient through chemotherapy, radiation and any other type of therapy", in contrast to Western models where a medical oncologist would typically handle non-surgical treatments.

To illustrate the **organ-based approach**, the table below summarizes which specialist departments typically manage common cancer types in Japan (and how this compares to the U.S. system for context):

Cancer Type	Main Treating Specialty -	Typical Treating Specialty – U.S.
	Japan	
Lung Cancer	Thoracic surgeons; Respiratory	Medical oncologists (for drug
	medicine (pulmonologists)	therapy); thoracic surgeons for
		surgery
Breast Cancer	Breast surgery / Surgery	Medical oncologists (systemic
	(surgical oncologists for breast)	therapy); breast surgeons for
		surgery
Colorectal Cancer	Gastrointestinal (GI) surgeons	Medical oncologists (systemic
	(surgery and chemotherapy)	therapy); colorectal surgeons for
		surgery
Gastric (Stomach) Cancer	Gastrointestinal surgeons (upper	Medical oncologists; GI surgeons for
	GI surgery)	surgery



Cancer Type	Main Treating Specialty -	Typical Treating Specialty – U.S.
	Japan	
Liver Cancer (HCC)	Hepatologists (liver specialists)	Medical oncologists (for systemic
	and GI surgeons (with	therapy); hepatologists for liver-
	interventional radiology)	directed therapy
Pancreatic Cancer	Hepato-pancreato-biliary (HPB)	Medical oncologists; HPB surgeons
	surgeons	for surgery
Prostate/Bladder/Kidney	Urologists (surgery and systemic	Medical oncologists (systemic
Cancer	therapy)	therapy); urologic surgeons for
		surgery
Gynecologic Cancers	Gynecologic oncologists (trained	Medical oncologists (systemic);
(ovarian, cervical, uterine)	as OB/GYN surgeons)	gynecologic oncologists for surgery
		(often dual role)
Head & Neck Cancer	Otolaryngologists/ENT surgeons	Medical oncologists (systemic); ENT
	(and related specialists)	or head & neck surgeons for surgery
Hematologic Malignancies	Hematologists (血液内科	Hematologist-oncologists (combined
(leukemia, lymphoma,	physicians) – manage chemo	training in medicine)
myeloma)	and transplant	

Table: Cancer types and the typical physician specialty managing treatment in Japan vs. the U.S. In Japan, organ-specific specialists (surgeons or organ-focused physicians) often oversee chemotherapy and other therapies for that cancer, whereas in the U.S. a medical oncologist usually coordinates systemic treatment.

This organ-specific care model is entrenched in Japanese hospitals. The majority of cancer patients in Japan are not initially seen by a "medical oncologist" at all, but rather by surgeons or physicians specialized in the cancer's organ. For example, lung cancer care is led by pulmonology and thoracic surgery departments, and breast cancer care by breast surgery specialists, with these doctors often prescribing the chemotherapy themselves. Similarly, a urologist will manage a bladder or prostate cancer patient's overall treatment plan, and a gastroenterological surgeon handles stomach or colon cancer patients, etc. This is a fundamental difference from the U.S., where a general oncologist (medical oncologist) typically orchestrates drug treatments across different tumor types.

One advantage of Japan's approach is continuity: the same specialist who diagnoses (and perhaps operates on) the patient also continues to manage their chemotherapy or other treatments, providing a seamless experience. Indeed, Japanese physicians often cite the benefit of "perfect continuity when patients transition from diagnosis to treatment", since the specialist who performed the biopsy or surgery is also handling the next steps of therapy. For



instance, "breast surgeons can offer both breast biopsy and systemic therapy" to their patients. In a culture where patients place deep trust in their doctors' guidance, this continuity aligns well with patient expectations and the traditionally paternalistic model of care.

However, this system can be **misleading for overseas observers**. Western pharma companies or researchers may search for "oncologists" to interview about a given cancer, only to find that in Japan the relevant experts may be surgeons or organ-specific clinicians rather than someone with the title "Oncologist." It's important to identify the *right* specialists for each cancer type in Japan – often by organ specialty – to get accurate insights. For example, to understand bladder cancer treatment in Japan, one would primarily speak with urologists; for stomach cancer, gastrointestinal surgeons; for lung cancer, pulmonary physicians or thoracic surgeons, etc. The concept of a single oncology specialist covering all tumor types is still emerging in Japan, which leads to differences in perspective and practice compared to the U.S.

2. Role of Medical Oncology (腫瘍内科)

"Medical Oncology" (腫瘍内科) – the specialty devoted to cancer drug therapy – is a **relatively recent development in Japan**. Unlike the U.S. (where medical oncology has been a well-established profession for decades), Japan only formally recognized and began building this specialty in the 2000s. The Japanese Society of Medical Oncology (JSMO) was founded in 2002 and began certifying physicians as medical oncologists in 2006. As of 2020, there were about 1,455 JSMO-certified medical oncologists in the entire country – a drastic increase from just 867 in 2013, but still **small relative to Japan's population and cancer burden**. In fact, even among the government-designated cancer hospitals, only about **54% had a dedicated medical oncology department by 2020**. This means nearly half of the major cancertreating hospitals still lacked a formal medical oncology department as recently as a few years ago.

Current scope and limitations: Where medical oncologists are present (usually in large cancer centers or university hospitals), they often focus on specific areas of unmet need or complex treatments. Initially, many medical oncology departments in Japan were responsible only for a limited range of cancers or new treatment modalities – for example, handling newer molecular-targeted drugs or immune therapies, or taking on cancers that don't squarely fall under a single organ specialty. A 2013 survey found that in hospitals which did have medical oncology, those specialists were mostly in charge of certain categories like cancers of unknown primary, soft tissue sarcoma, or testicular cancer, and were heavily involved in administering novel targeted therapies. Meanwhile, more common



tumors (lung, breast, colon, etc.) were often still managed by the respective organ departments, sometimes with the medical oncologist acting only as a consultant. By 2020, the role of medical oncology had *expanded* somewhat – these departments became more involved in gastrointestinal cancers (esophagus, stomach, colon, pancreas), head and neck cancers, and immunotherapy administration, reflecting the growing acceptance of medical oncologists' expertise. Still, the **majority of front-line cancer care in Japan continues to be delivered by non-oncologist specialists**, with medical oncologists playing a supporting or specialized role.

It's important to note that **medical oncologists in Japan are far fewer in number per capita than in Western countries**. Many community hospitals and smaller cancer clinics in Japan have no medical oncologist on staff at all. As a result, a patient in a regional hospital will likely have their chemotherapy managed by, say, their surgeon or an organ-specific physician, because there simply isn't a medical oncologist available. The government has recognized this gap and, through national cancer control programs, has **encouraged the hiring and training of more medical oncologists** at major hospitals. This push aims to ensure that each designated cancer center has at least one JSMO-certified medical oncologist who "is capable of treating patients with any type of cancer". Over time, we can expect the presence of medical oncology to increase, which may gradually shift Japan's care model toward a more multidisciplinary team approach.

Why the slow adoption of medical oncology? Culturally and historically, Japanese cancer care was dominated by surgeons and organ-specific experts, and there was pride in a system where the same doctor oversaw all aspects of care. When systemic chemotherapy became more effective and complex in recent decades, Japan initially addressed this by having organ specialists acquire chemotherapy skills, rather than immediately creating a new specialty. Medical oncology as a dedicated field had to overcome not only a lack of existing training programs but also some resistance or skepticism from established specialists. Only in the 2000s did the paradigm begin to shift, influenced by international exposure (e.g., Japanese doctors training at U.S. cancer centers and bringing back the concept of multidisciplinary "team oncology") and by necessity as cancer drug therapy became more sophisticated.

Today, medical oncologists still face practical limits in Japan. Many work in consultative roles or handle referred cases: for instance, if a patient's cancer progresses beyond the standard treatments the organ specialist can provide, or if there's a clinical trial for a new drug, a medical oncologist might take over. In some hospitals, they primarily manage cancers that cross multiple organ systems or rare cancers that other departments are less familiar with (such as cancers of unknown primary, which no single organ department "owns"). In other cases, medical oncologists run outpatient chemotherapy centers, overseeing the



infusion unit for patients of various cancer types, while the patient's primary organ doctor remains involved. It's a evolving dynamic – **Western clients should be aware that a "medical oncologist" in Japan is often a scarce resource**, and depending on the cancer type being studied, the relevant insights might still need to be gathered from other specialists who are the ones seeing the majority of those patients.

In summary, 腫瘍內科 (medical oncology) in Japan is an emerging but still limited discipline. It has grown significantly in the last 15+ years and continues to expand its footprint, especially in major centers. However, it has not yet supplanted the organ-based system. For market research or collaboration purposes, this means engaging both medical oncologists and organ-specific doctors is crucial – the former for their broad oncology drug expertise and the latter for their direct experience managing the patient population in question.

3. Role of Cancer Centers and University Hospitals

Japan has established a network of **designated cancer centers and academic (university) hospitals** that form the backbone of its oncology care infrastructure. These institutions are roughly analogous to NCI-Designated Cancer Centers or major academic cancer hospitals in the U.S., but they play an even more pronounced role in Japan's healthcare system due to the centralization of expertise.

Designated Cancer Care Hospitals (がん診療連携拠点病院): Under the national Cancer Control Act and programs, the Ministry of Health, Labour and Welfare (MHLW) has designated hundreds of hospitals as specialized cancer care centers. As of 2020 there were approximately 393 such Designated Cancer Care Hospitals (DCCHs) across Japan. These include leading university hospitals, the National Cancer Center hospitals, and certain large regional hospitals with strong oncology departments. DCCHs are mandated to provide standardized, high-quality cancer care and serve as regional hubs. For example, they are required to have specialist physicians on staff (oncologists, oncology-trained surgeons, radiotherapists, palliative care physicians, etc.) and to coordinate with smaller community hospitals in their region. They also must offer patient counseling and information services, and many have palliative care teams and other support infrastructure in place by requirement.

These cancer centers and top-tier hospitals are where most cutting-edge cancer work happens in Japan. They handle the complex cases – advanced or rare cancers, multi-modality treatments, clinical trials, etc. – and drive oncology research. For instance, virtually all Phase I and II clinical trials of new cancer drugs in Japan are carried out at these centers or university hospitals, since they have the specialized staff and patient volume to



conduct such studies. They also commonly participate in global clinical trials, acting as the Japanese sites for international studies. For new therapies, these centers are usually the **first adopters** in the country (similar to academic medical centers in the U.S. being early adopters of innovations).

Importantly, a significant proportion of Japanese cancer patients are treated at these specialized centers. A recent analysis showed that **over half (52.5%) of all cancer patients in Japan receive their treatment at a designated cancer hospital**. This underscores how central these hubs are to cancer care delivery – it's not just a small elite subset, but truly a large share of the population that ends up at these hospitals, especially for major cancers. Patients often travel or get referred to cancer centers if their local hospital lacks the necessary expertise or facilities. For example, a patient in a smaller city might be referred to the prefectural cancer center or a university hospital in a nearby urban area for advanced surgery, experimental therapy, or simply because the outcomes are known to be better at high-volume centers. Indeed, outcomes **are** better – studies have indicated higher survival rates for patients treated at the designated hospitals compared to non-designated ones, likely due to access to experienced multidisciplinary teams and protocols.

University hospitals in Japan (particularly the big national/public ones attached to medical schools) often double as designated cancer centers. They play a dual role of providing advanced care and conducting research/education. University hospitals are typically where **expert panels or tumor boards** convene for genomic profiling and precision medicine discussions, for instance, and they house many of the country's leading oncologists and surgeon-scientists. These hospitals usually have multiple departments dealing with cancer (organ-specific surgical departments, radiation oncology, medical oncology if established, etc.) and are the workplaces of key opinion leaders who contribute to developing treatment quidelines.

National Cancer Center and Specialized Institutes: Japan also has flagship institutions like the National Cancer Center (with campuses in Tokyo and in Chiba) which are directly focused on cancer and run by the national government. Similarly, there are specialty centers (e.g., Cancer Institute Hospital of JFCR in Tokyo, Shizuoka Cancer Center, etc.) that are renowned for particular strengths (such as cutting-edge technology or high volumes in specific cancers). These centers often set the trends for the rest of the country – for example, if a new surgical technique or chemotherapy protocol is pioneered at a top center, others will observe and gradually adopt it.

Overall, for an overseas stakeholder, it's important to **engage with these cancer centers** and academic hospitals when assessing the Japanese oncology landscape. They are the epicenters for clinical trials, new drug introductions, and guideline development.



Physicians at these centers are typically well-versed in global standards (many have international training or collaborate in global studies) and thus can provide a nuanced comparison between Japanese practices and Western practices. Meanwhile, understanding their role also helps clarify that **smaller community hospitals often defer to the centers** – whether by referring patients or by closely following the treatment protocols that are first established at the larger institutions.

In terms of **market research pitfalls**, one common misinterpretation is to assume that if a therapy isn't being widely used at general hospitals, it's not used in Japan at all – whereas in reality it might be readily used at the cancer centers but just hasn't diffused outward yet. The adoption curve in Japan often **starts at the cancer centers/university hospitals**, then later extends to community hospitals (more on this in the new treatments section). Therefore, interviews at cancer centers might show more progressive opinions or usage of new drugs, while community doctors might appear more conservative; both perspectives reflect the staged nature of adoption in Japan's system.

Finally, cancer centers also have an outsized role in **guideline creation and education**: Experts from these institutions chair the committees that write Japan's clinical practice guidelines, and the centers often provide training to regional providers (for example, through outreach programs or symposia). The **Japan Team Oncology Program (JTOP)** mentioned in the context of MD Anderson's collaboration is one example of efforts to disseminate multidisciplinary team concepts from top centers to the broader oncology community in Japan. Over the past decade, these efforts – funded in part by government initiatives – have improved capabilities even outside the main cities, but the gap remains. Thus, knowing **which hospitals are the key cancer centers** and how they function is vital for interpreting any research or data from Japan.

4. Patient Communication and Consultation Patterns

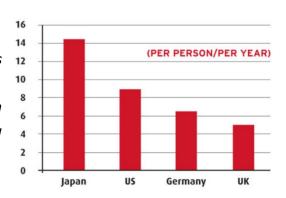
Patient-physician interaction in Japan differs notably from Western norms, which impacts how patient journeys are understood. In Japanese oncology settings, patients generally consult directly with physicians for most of their needs and questions, rather than with nurses or physician assistants. This is rooted in the broader healthcare context: Japan's system does not utilize non-physician providers (like nurse practitioners or physician assistants) for independent patient management. By law, only licensed physicians can prescribe and manage treatments, and there is essentially no role equivalent to an American N.P. or P.A. in oncology clinics. As a consequence, tasks that in the U.S. might be handled by an oncology nurse navigator or a chemotherapy nurse educator – such as reviewing side



effects, answering patient phone calls about symptoms, routine follow-up questions, etc. – often end up being handled by the **doctor** in Japan.

Another factor is **accessibility**. Thanks to Japan's universal insurance and lack of gatekeepers, patients tend to visit clinics and hospitals **far more frequently** than in the U.S. It's common for Japanese cancer patients to have very frequent follow-up appointments, often every week or two during active treatment. In fact, Japan has one of the highest rates of physician consultations per capita in the world. On average, a Japanese patient sees a doctor about **13-14 times per year**, whereas an American patient averages only a few visits per year. One source indicates roughly *14 outpatient visits per person annually in Japan vs.* ~3 *in the U.S.*. This stark difference means Japanese patients are accustomed to **regular face-to-face time with their physician**, even for relatively minor issues.

Japan has the highest number of doctor consultations per person per year among developed countries, reflecting how frequently patients see physicians. In oncology, this translates to patients directly meeting doctors often for follow-ups, questions, and support.



These patterns result in a scenario where **the physician is the central communicator and coordinator** for the patient. Patients will often directly ask their doctor about side effect management, prognosis, next steps, etc., rather than going through a nurse or ancillary staff. Culturally, Japanese patients also tend to be less assertive in questioning or challenging their doctor's advice; there is a traditional respect for the doctor's authority. While this is gradually changing among younger generations, many patients still follow a **paternalistic model** – the doctor leads the discussion and decisions, and the patient (and family) absorb the information mostly in a one-way direction. Multidisciplinary clinics or shared decision models (involving, say, pharmacists, nurses, and doctors together) are not yet the norm, though they are slowly being introduced at some cancer centers.

From a market research perspective, this means that interviewing physicians can indeed give a very complete picture of the patient journey in Japan. The oncologists or surgeons managing the patient can often recount the entire sequence of care: from the patient's first visit and initial diagnosis, through treatment decision-making, management of side effects, and follow-up routines. They directly handle patient education about illness and therapy in the consultation room, since patients rarely receive extensive counseling from nurses. In



Japan, for example, a chemotherapy patient typically sees the doctor at each cycle or visit; the nurse's role is more focused on technical tasks (taking vitals, administering IVs as per orders) rather than providing independent guidance. This contrasts with the U.S., where nurses might conduct "teaching sessions" or routine toxicity checks by phone. A Japanese oncologist might be surprised to hear that in the U.S. patients sometimes call a nurse line – in Japan, if a patient has an issue, they often come in to see the doctor or at least the doctor will return their call.

It's worth noting that Japanese nurses in oncology, while highly trained, function differently. An American advanced practice oncology nurse may adjust medications or lead survivorship planning; in Japan, nurses do not have such autonomous scope. The MD Anderson "Japan Team Oncology" collaboration noted that Japanese nurses were in a "much less assertive role in patient care" and had to adapt to concepts like nurse-led interventions which were routine in the West. Efforts are underway to enhance the nursing role (for example, training oncology certified nurses), but those roles mostly supplement physician care rather than replace any aspect of it.

For **communication patterns**: Japanese patients often prepare a notebook or list of questions for their doctor and then go through them during the short consultation time. Because doctors are extremely busy (seeing many patients per day due to the high visit volume), each appointment might be brief (e.g., 5-10 minutes in a crowded hospital clinic). Nonetheless, patients *expect* to speak to the doctor on each visit. It would be unusual for an oncology patient to routinely meet with a nurse or pharmacist instead of the doctor. Some cancer centers do have multidisciplinary outpatient clinics (where a patient might see, say, a nutritionist or pharmacist for specific counseling), but this happens only in certain contexts and always in addition to – not in place of – the physician consultation.

Implications for understanding patient journeys: When conducting research on Japanese patient experiences, interviewing the treating physicians (whether they are medical oncologists, surgeons, or other specialists) is very appropriate because these doctors can narrate the typical journey. They are intimately involved at each stage: delivering the diagnosis (in Japan, the physician personally informs the patient of the cancer – and historically, doctors were even hesitant to tell patients about cancer at all, reflecting how central the doctor is in controlling information), discussing treatment options, obtaining informed consent, managing follow-ups, and so forth. There is less delegation to a broader care team.

That said, one must also be aware that physicians might emphasize medical/scientific aspects and may not fully capture some psychosocial elements a patient experience. In Japan, however, if you were to, for instance, ask "When do patients typically learn about their



diagnosis and how do they decide on treatment?", the physician can describe this process from their direct involvement (e.g., "I explain the diagnosis in my office, often with a family member present, using the official booklet…" etc.). Physician interviews are therefore quite reliable for mapping out the patient journey in Japan, whereas in the U.S. you might have to triangulate inputs from nurses, patient navigators, etc., to get the full picture. In summary, Japanese patients consult physicians directly and frequently, making the physician the best single point-of-contact to understand patient care pathways. The lack of intermediary professionals in patient counseling means the physician's perspective closely mirrors the patient's clinical experience. Overseas clients should leverage this by engaging Japanese physicians for insights but also remain sensitive to the fact that some nuances (emotional support needs, etc.) might be under-addressed in physician narratives due to the cultural communication style.

5. Introduction and Uptake of New Treatments

Bringing a new cancer therapy to patients in Japan involves a multi-step process, with **several key differences from the U.S.** in terms of regulatory pathway and adoption behavior. Below is an overview of how a novel treatment (e.g., a new drug) typically makes its way into routine practice in Japan:

- 1. Clinical Trials and Research: New treatments (be it drugs or devices) are usually tested in clinical trials, many of which are conducted at the cancer centers and university hospitals discussed above. Japan often participates in global trials, but there are also Japan-specific studies (sometimes required to gather data in Japanese patients for regulatory approval). By the time a drug is ready for approval submission, Japanese investigators (KOLs at major hospitals) are usually familiar with it through these trials.
- 2. Regulatory Approval by PMDA: Japan's regulatory authority, the Pharmaceuticals and Medical Devices Agency (PMDA), is equivalent to the FDA. Pharmaceutical companies submit their data to PMDA for review. The PMDA process historically led to a "drug lag" (drugs approved later in Japan than in the US/EU), but this gap has narrowed in recent years. Once PMDA reviewers conclude a drug is safe and effective, it receives approval (with specific indications). Of note, PMDA may sometimes make different decisions than FDA for example, Japan approved bevacizumab for breast cancer at a time when the FDA had withdrawn that indication, reflecting a different risk-benefit consideration. Approval in Japan almost always requires some data in Japanese patients, but extensive global data is also considered. PMDA has introduced



mechanisms like *Sakigake* (fast-track designation) to speed approvals of innovative therapies.

- 3. Pricing and Reimbursement (NHI listing): After PMDA approval, a new drug must be assigned a price and be listed on the National Health Insurance (NHI) reimbursement formulary. A government committee negotiates the price with the manufacturer, a process that typically concludes within a few months of approval. Once a drug is listed (covered by insurance), hospitals can start to prescribe it and get reimbursed. (In Japan, essentially all approved cancer drugs do get listed for coverage often at launch since the national system covers all proven therapies, albeit sometimes usage might be restricted to certain hospital types or require paperwork if very expensive.)
- 4. Initial "watchful waiting" period (~6 months): A peculiar phenomenon in Japan is that even after a drug is approved and available, many physicians exhibit a cautious approach for the first several months. There is often a 6-month unofficial waiting period that has been observed anecdotally in which doctors hold off widespread use until they see more post-marketing safety data and real-world outcomes. One reason is that Japan mandates an Early Post-Marketing Phase Vigilance (EPPV) for all new drugs, roughly the first 6 months after launch, where safety monitoring is intensified. During this time, pharmaceutical companies must collect detailed reports of any adverse events, and physicians are frequently reminded to be vigilant. This heightened scrutiny can psychologically encourage doctors to use the drug cautiously (perhaps only for patients who truly have no alternatives, or in specialized centers that are closely monitoring). As a result, the uptake curve for new oncology drugs in **Japan starts off slower** than in the U.S. In fact, a study of cancer drug dissemination in Japan found a lag of a couple of months between approval and the first real-world prescription in some regions, and a generally slower initial adoption compared to something like diabetes drugs. After that initial hesitation, usage tends to ramp up as confidence grows.
- 5. Guideline Adoption and Broader Uptake: Japanese physicians place heavy importance on official treatment guidelines (discussed more in the next section). Typically, not long after approval, the relevant Japanese society will update its clinical practice guidelines to include the new therapy (assuming it is now standard of care). Once a therapy is written into the guidelines and doctors have observed early users report positive outcomes (and no unanticipated problems), the broader community of physicians begins to prescribe it more freely. This means that about 6-12 months postapproval, the drug starts seeing wider adoption beyond the major cancer centers,



reaching more general hospitals and more patients. The adoption may still be measured – Japanese doctors are culturally more conservative about being "first movers." It's often said that many will wait until a respected professor or a big university hospital reports success with the new treatment before they themselves try it. This cautious adoption culture is **quite prevalent**.

6. Continued Post-Marketing Surveillance: Even after the drug is adopted into practice, Japan has mechanisms like all-case surveillance for certain drugs (especially if there are concerns about ethnic differences in response or safety). In oncology, if a drug had severe side effect risks, sometimes every patient who gets the drug must be registered during the EPPV period so outcomes can be tracked. This can be a deterrent to some doctors using it until those requirements lift. Eventually, if no major issues arise, these special precautions are relaxed.

Comparing to the U.S.: In the U.S., new oncology drugs might be used very quickly after FDA approval - often within weeks, as soon as they are shipped to pharmacies and insurance coverage is in place. American oncologists, especially early adopters at academic centers, frequently prescribe new agents based on pivotal trial data and may even use them "off-label" in other situations if there's compelling evidence. In Japan, off-label use is essentially not permitted under the public insurance system, which means a drug will only be used for the exact indication it was approved for (until further approvals or guideline changes occur). This naturally makes Japanese doctors more restrained; they cannot legally improvise outside of approved indications, so they wait for formal approvals and guideline endorsements. Additionally, the tendency to stick to established norms is stronger – a physician deviating from the pack in treatment choice is rare. This is why you'll see a uniformity in prescribing habits in Japan and sometimes a **delay before a new innovation becomes commonplace**. For example, when immune checkpoint inhibitors (like PD-1 inhibitors) were first approved in Japan, the uptake was initially slow at general hospitals - many oncologists wanted to see the results from the first few hundred patients (treated at the National Cancer Center and big universities) and the official guideline recommendations before incorporating it into their practice. After about a year, it became standard of care everywhere. This pattern repeats often.

Implications for market research: When assessing a new drug's potential in Japan or analyzing why a launched drug isn't meeting global sales expectations in Japan initially, one should consider this built-in **lag and caution phase**. It is not unusual to see low usage in the first 6 months post-launch (except perhaps at a handful of expert centers), followed by a steep increase in uptake in year 2 once the community is convinced of the drug's value and safety. Japanese physicians might even explicitly say in interviews, "I prefer to wait and see



a new drug's track record for a while before prescribing it widely." This is sometimes misconstrued by Western observers as lack of interest or skepticism about the drug, but it often reflects a cautious philosophy and respect for consensus. Once that consensus (through guidelines and peer experience) is built, the Japanese market can become very robust for the drug, given the large patient populations and willingness to use it in all eligible patients (since, conversely, Japanese doctors **do not** tend to use unapproved therapies, they fully embrace the approved ones as per guidelines).

Finally, Japan's national health insurance environment means virtually all patients who need the drug can get it once it's adopted (there's no concern of uninsured patients or major payer refusal as in the U.S., aside from cost-containment rules that might restrict use to certain lines of therapy). However, the government does monitor budget impact and may institute price cuts or other measures if a new drug is very expensive and widely used. This doesn't stop doctors from using it, but it's part of the adoption landscape (for instance, there are financial incentives for using cost-saving alternatives like biosimilars, and very expensive new therapies sometimes come with usage guidelines to ensure cost-effective application). In summary, the journey of a new oncology treatment in Japan goes from clinical trial to PMDA approval, then through a cautious early post-market phase, and finally into broad acceptance guided by official protocols. Understanding this flow is crucial to interpret physician behavior and uptake trends in the Japanese market.

6. Importance of Guidelines

In Japan, clinical practice guidelines hold significant sway over treatment decisions. Oncologists and other physicians often adhere to guidelines *very closely*, much more so than the average practitioner in the U.S. might. These guidelines are typically issued by Japanese professional societies (for example, the Japanese Society of Clinical Oncology (JSCO), the Japanese Society of Medical Oncology (JSMO), or tumor-specific organizations like the Japanese Breast Cancer Society, Japan Lung Cancer Society, etc.). They distill the latest evidence into formal recommendations and are updated regularly. Japanese doctors view these guidelines as the standard of care and there is a strong tendency to **follow them "by the book."**

A Japanese oncologist will frequently refer to "the guideline (ガイドライン) treatment" as the course of action for a patient, meaning the regimen or sequence recommended in the nation's consensus guideline. Deviation from the guidelines is relatively uncommon and usually happens only within the scope of clinical trials or when there truly are no guideline-supported



options left. Part of the reason is cultural/professional – doing something clearly outside the guidelines might be seen as experimental or risky in a system that values proven consensus. Another part is **systemic**: because Japan's insurance will generally only reimburse standard treatments, and *off-label use is not covered*, physicians have practical incentives to stick to what's recommended and approved. In the U.S., a doctor might give a drug off-label if insurance approves it or if there's phase II data; in Japan, that would not be reimbursed and thus almost never occurs in routine practice. The **guidelines effectively map to what is both medically and financially permissible**.

To highlight the weight of guidelines: In the treatment of breast cancer, Japanese oncologists state that they can achieve "state of the art" treatment for patients on the basis of the treatment guideline by the Japanese Breast Cancer Society. This quote illustrates that doctors equate following the guideline with giving the best possible care. The guidelines are comprehensive documents that cover recommended therapies line by line for each stage of disease. Japanese physicians contribute extensively to these – the committees include nationwide experts – and once published, there is broad compliance. Surveys in certain cancers (like lung cancer) have shown high rates of guideline-concordant treatment patterns in Japan, even as new drugs were introduced.

Furthermore, **international guidelines** (like NCCN or ESMO guidelines) are often consulted, but Japanese doctors still rely on their own domestic guidelines that take into account local approvals and data. Sometimes, if a foreign guideline recommends something not yet approved in Japan, the Japanese physician will note it but *won't implement it* until their own guideline and regulatory approval catch up. This can be a source of misinterpretation: A U.S. client might see that "drug X is recommended in NCCN for second-line" and wonder why Japanese doctors aren't using it yet – the reason likely being it wasn't in the Japanese guideline because perhaps it was only recently approved or still under review by authorities. Once it gets written into the Japanese guideline, usage will align.

Another reason guidelines are followed is the way the medical community is structured. Many physicians in Japan (especially in the same region or within professional networks) will discuss difficult cases and almost uniformly come to the same conclusion by referencing guidelines. There is less of a "renegade" culture in treatment approach. Also, Japanese patients typically do not seek multiple opinions from different doctors as often as American patients do; they tend to stay with one institution and trust the team. So there is less variation introduced by patient-driven requests for alternative regimens. All these factors reinforce a **standardized approach to therapy**.

From a **pharmaceutical standpoint**, having a therapy included in the Japanese guidelines is critical for its success. Physicians often wait for that stamp of approval. The guideline inclusion



often follows on the heels of regulatory approval and some evidence of benefit in the Japanese population. When new evidence comes out internationally, Japanese guideline committees will evaluate it and update their recommendations, but sometimes a step behind if the drug isn't yet locally available. Japan does adapt global guidelines to local versions (for example, JSCO and JSMO have worked on adapting ESMO guidelines to Asian contexts in some cases). **Strict guideline adherence** can be seen in concrete examples: For instance, if the guideline says first-line therapy for advanced lung cancer is regimen A, virtually all doctors will start with regimen A for eligible patients. If second-line says either drug B or C, they will choose between B or C, but rarely something outside that list. In contrast, an American oncologist might consider a clinical trial or a not-yet-listed option for a patient who might benefit, whereas a Japanese oncologist would more likely stick to the official algorithms. The upside is consistency and predictability; the downside could be a slower incorporation of novel approaches that haven't yet made it into guidelines.

Consequences in market research: When interpreting physician feedback in Japan, if a doctor says "I will use this new drug according to the guideline," they genuinely mean they will wait for and follow the guideline recommendation on how to use it. You might also hear, "If there is no guideline recommendation, it's difficult to use that treatment." Understanding this helps avoid misjudging Japanese physicians as overly rigid – it's part of their professional practice norm and is tied to reimbursement policy. Even in areas like supportive care or palliative care, guidelines (often issued by Japanese Societies) guide practice more so than individual clinician preference.

One should also be aware that **hospital protocols** often mirror guidelines. In many Japanese hospitals, especially the designated cancer centers, there might be internal treatment protocols (治療プロトコル) that are basically the guideline translated into institutional policy. Doctors then must follow those when treating patients at that hospital. There is thus a top-down enforcement of guideline-based care as well.

Finally, because of this guideline-centric approach, marketing messages or medical education by pharma in Japan often focuses on showing how a new therapy fits into the guideline framework. It's effective to align with the authorities and thought leaders who write the guidelines. If a company can get key data into the guideline update, the battle is largely won since physicians will adopt it swiftly afterwards.

In conclusion, Japanese physicians tend to follow official oncology guidelines closely when deciding treatments, leading to a uniform standard of care across the country. Deviations are rare due to cultural, clinical, and systemic reasons. For overseas researchers, this means that understanding the current Japanese guidelines for a disease area is essential – it will essentially tell you what most doctors are doing for patients. If something isn't in the



guidelines (or not yet approved in Japan), you can expect uptake to be minimal. Conversely, once a new therapy is written into the guidelines, Japanese doctors will incorporate it diligently. This guideline-driven practice, coupled with the other differences discussed (specialist system, communication style, cautious adoption, etc.), forms a cohesive picture of Japan's oncology ecosystem that, while high-quality, can be misinterpreted if one assumes it functions just like the U.S. system. By appreciating these key differences, U.S.-based pharma stakeholders and researchers can better navigate and accurately assess the oncology landscape in Japan.



References:



Cultural Shift in Cancer Care | MD Anderson Cancer Center



Who treats lung cancer? Results from a global survey - PubMed

CCO

cco.amegroups.org

Medical oncology in Asia - Tamura - Chinese Clinical Oncology

pmc.ncbi.nlm.nih.gov

Current status of medical oncology in Japan and changes over the most recent 7-year period: results of a questionnaire sent to designated cancer care hospitals - PMC

jpsmjournal.com

<u>Progressive Development and Enhancement of Palliative Care Services in Japan: Nationwide Surveys of Designated Cancer Care Hospitals for Three Consecutive Years - Journal of Pain and Symptom Management Care Hospitals for Three Consecutive Years - Journal of Pain and Symptom Management</u>



Coverage of the hospital-based cancer registries and the designated cancer care hospitals in Japan - PubMed

pmc.ncbi.nlm.nih.gov

Difference of environment behind research and clinical practice between USA and Japan - PMC



Responsibility and cancer disclosure in Japan - ScienceDirect.com

insights.bio

Experiences from Japan – SAKIGAKE Designation System



pmc.ncbi.nlm.nih.gov

How are new drugs disseminated in Japan? Analysis using the National Database of Health Insurance Claims of Japan - PMC

pmc.ncbi.nlm.nih.gov

Analysis and enhancement of risk management for ethnic differences in antineoplastic drugs in Japan - PMC

annalsofoncology.org

Precision Oncology in Clinical Practice in Japan - Annals of Oncology

ajmc.com

Financial Incentives Drive Biosimilar Adoption in Japan

annalsofoncology.org

Treatment of Metastatic or Recurrent Breast Cancer in Japan: Clinical Practice, Clinical Research and Regulatory Science - Annals of Oncology

tandfonline.com

Systemic treatment patterns and adherence to guidelines in Japan

ejgo.org

[PDF] Japan Society of Gynecologic Oncology 2022 guidelines for uterine ...



English version of Japanese Clinical Practice Guidelines 2022